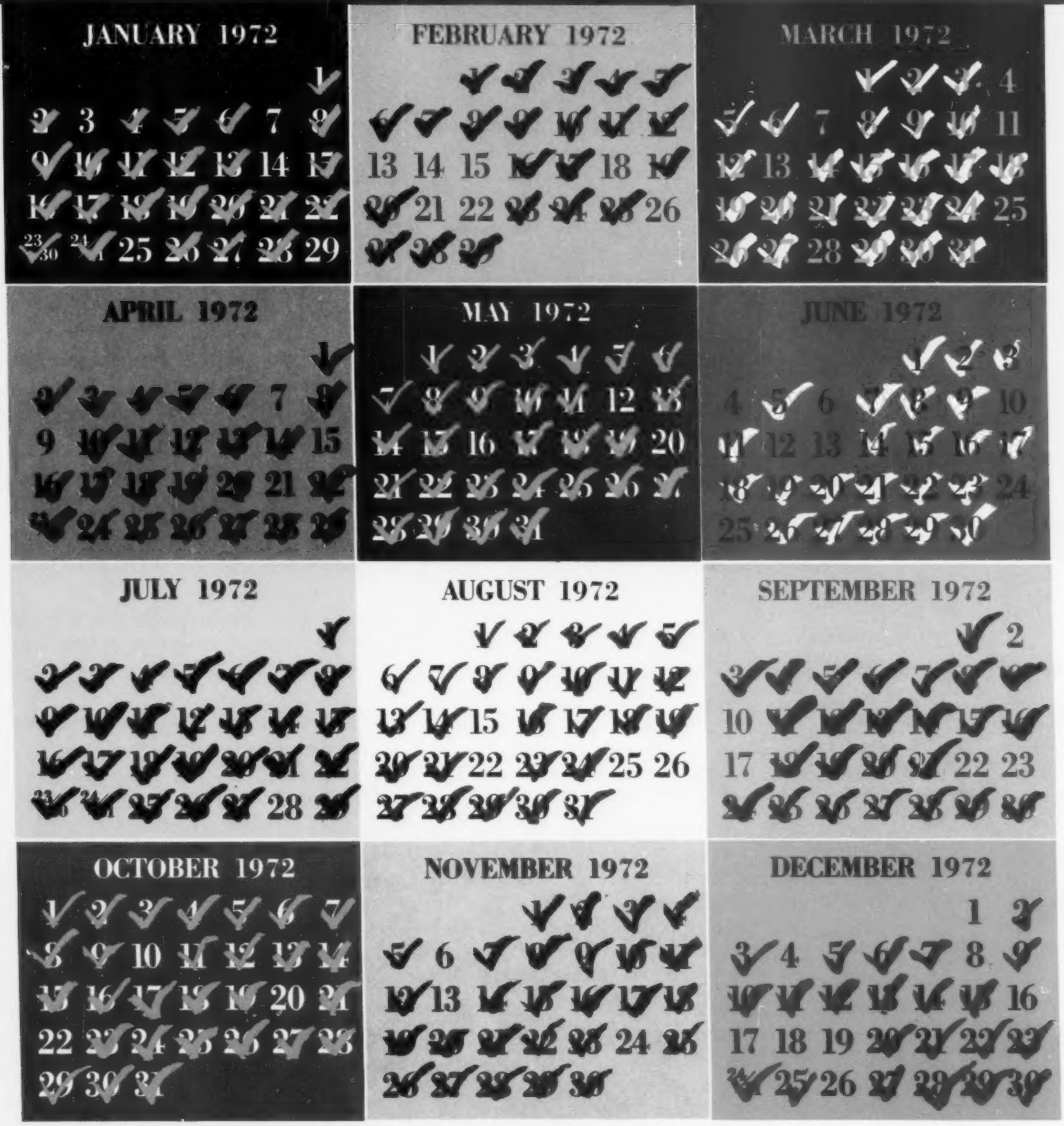
Incorporating *International Commerce*

DECEMBER 27, 1971

A UNITED STATES
DEPARTMENT OF
COMMERCE
PUBLICATION

Commerce Today

Coming Developments in Business and Technology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NOVEMBER 1972
DECEMBER 1972

Commercial Holidays Abroad

FROM THE SECRETARY

Opening The Door To More USSR Trade

Will there be a substantial increase in trade between the Soviet Union and the United States in years ahead?

During 11 days in the Soviet Union (November 20 to December 1), I held extensive discussions on this question with Chairman Kosygin and other USSR governmental leaders. A detailed account of my mission will appear in a subsequent issue of COMMERCE TODAY.

The purpose of these talks was exploratory —to focus on opportunities for expanded commerce between the two countries, and to isolate specific impediments to greater trade on both sides and discuss ways of removing them.

My mission was not to negotiate, and there were no agreements entered into beyond concurrence to continue bilateral talks at a subcabinet level beginning next month. Instead, I went to find whether there was reasonable hope for common understanding upon which to build substantial two-way trade in the future.

On that basis, I believe the potential is there, and it is large.

Conclusions

Whether it will be realized remains to be seen. An improved climate for trade can exist only within an improved climate of political relations.

Given that condition, several conclusions are possible:

First, the Soviets apparently are anxious to do substantially more business with private American firms in selected areas of commerce, if appropriate terms can be developed, although they have said that there is nothing they need from us which they cannot buy elsewhere.

Second, the Soviets will have to learn much more about the means of doing business with private American enterprise, and American companies will have to learn much more about doing business with the USSR. The Soviets need to do extensive market research here; our companies need greater freedom to operate, travel and communicate there.

Third, if the USSR is willing to buy substantial quantities of American products, and we buy substantial quantities of Soviet resources and raw materials, this can be a very great advantage to American employment.

Fourth, doing business with the United States will not change the traditional anticapitalist viewpoint of the Soviet Union, nor will it alter their system. They would deal with us on the same competitive basis they already trade with other Western countries.

Fifth, if the political climate continues to improve, both sides could expect a significant multiple to occur in the present level of Soviet-American trade.

Development

The role of the United States government in this development is to take whatever steps may be feasible in our national interest to help improve the climate.

Beyond that, achieving greater trade will depend to a great extent upon the inherent competitive spirit and judgment of private American business.

No one on either side knows for certain whether the requisite improvement of overall relations will take place, to make possible a normalization of commercial relationships. But as the two largest economies in the world, the U.S. and the USSR logically could expect a far greater economic interchange than they now have.

Both President Nixon and Chairman Kosygin have expressed the hope that stronger commercial ties will develop. If my mission helped to open the door to that development, it will have been a very gratifying endeavor.

Maurice H. Stans

Commerce Today
Incorporating *International Commerce*

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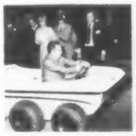

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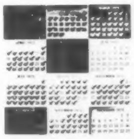

COVER: *Almost every day in the year is a holiday somewhere in the world. To help U.S. business travelers plan workable itineraries, U.S. Commercial Officers overseas have prepared lists of the commercial holidays in 131 countries. The seven-page presentation begins on Page 50.*

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Published biweekly by the U.S. Department of Commerce, Washington, D.C.

Annual subscription rate $15 ($3.75 additional for foreign mailing, $14.30 additional for domestic air mailing). Single copy 60 cents. Make checks or money orders payable to Superintendent of Documents and mail to Superintendent, U.S. Government Printing Office, Washington, D.C. 20402, or to any U.S. Department of Commerce Field Office.

All subscription inquiries and address changes should be sent to the Superintendent of Documents, at the above address. This is the central distribution agency for U.S. Government publications.

Microfiche copy available at 95 cents per issue from National Technical Information Service, Springfield, Virginia, 22151.

Other inquiries should be sent to the U.S. Department of Commerce, 14th Street and Constitution Avenue, Washington, D.C., 20230.

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Use of funds for printing this publication approved by the Director of the Office of Management and Budget November 12, 1971.

ECONOMIC HIGHLIGHTS

Recovery Pattern Strong In Many Sectors; Faster Pace Expected In Industrial Output

Economic Highlights is prepared by Dr. Harold C. Passer, Assistant Secretary for Economic Affairs, and is based on the latest economic indicators (see charts on adjoining page).

The U.S. economy has been on the upswing for the past 12 months, and in many major sectors the advances so far compare favorably with the gains in previous business expansions.

A matching of some of the significant current data with the average of the first 12 months of the other four recoveries since World War II offers some interesting insights on the old year and provides some valuable clues on the probable patterns of progress in the new year.

The charts on the opposite page show how six economic series performed in 1971 with the pattern of previous recoveries as a backdrop. In each case, the red line indicates the percentage changes in the current series relative to its level at the peak of the previous cycle (November 1969). This level is indicated by the horizontal straight line. Each current series is plotted from November 1970, the point at which the recovery began. The black line shows what would have occurred if the series had followed the typical pattern of the previous four business cycle upswings. This "typical pattern" is the median performance of the economic expansions that began in 1949, 1954, 1958 and 1961.

The percentage gain during expansions is usually large if the preceding slowdown was severe. The 1970 recession was the mildest of the postwar period; yet, some of the major components rebounded sharply following the low point, or trough, in November 1970. As the first chart shows, retail sales in real terms moved well ahead of the typical pattern and scored one of the strongest gains on record.

Housing starts also soared, continuing a vigorous uptrend that began in early 1970. Business spending for new plant and equipment also performed beter than might have been expected. The plant and equipment series is not adjusted for price changes, but even after such an adjustment, it would still show a stronger-than-expected performance.

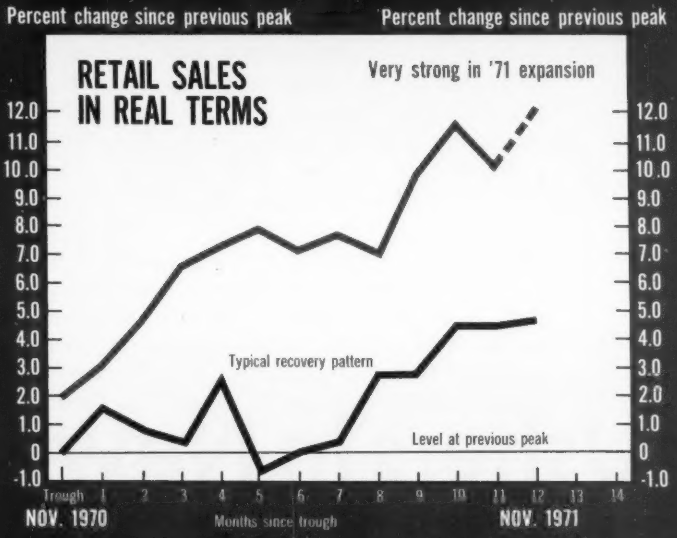
Employment remained fairly high during the slowdown and has now reached about the same level that was attained at a similar point in other upswings. The more recent experience has been particularly encouraging, with five consecutive monthly increases since June. Unemployment has remained at approximately 6 percent most of this year, however, primarily because of large increases in new job-seekers (in part related to the continuing reduction in the armed forces) rather than lack of growth in the number of jobs.

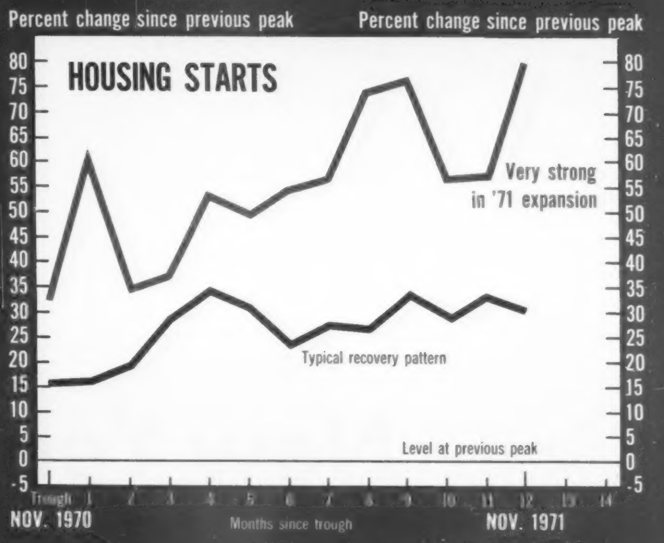
Real Gross National Product has not advanced as rapidly in the current recovery as the median. The main reason is the lack of strong growth in industrial production, a sector that has been restrained by (1) the cutbacks in defense and aerospace orders, (2) the sharp rise in imported goods, and (3) the continuing long-term shift in spending from goods to services.

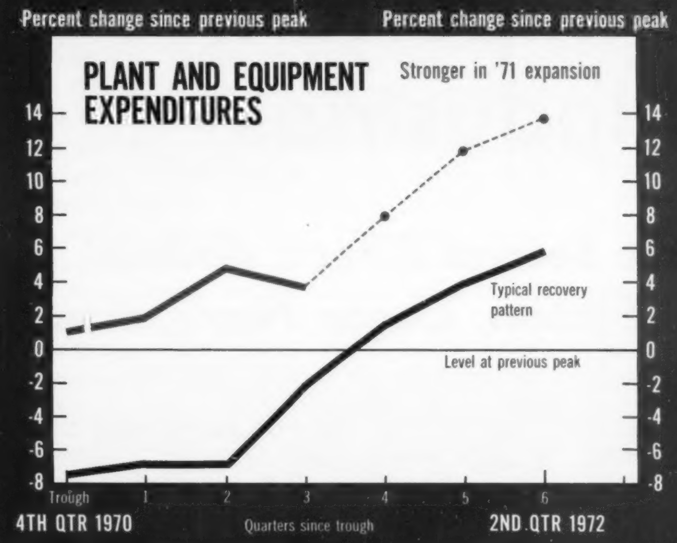
The first two special factors probably will have little further negative influence in 1972, however, and industrial production may well turn out to be one of the fastest growing sectors in the months ahead. Another plus factor is the strong probability that businessmen will need to build up their inventories, thereby adding to demand for factory-produced goods.

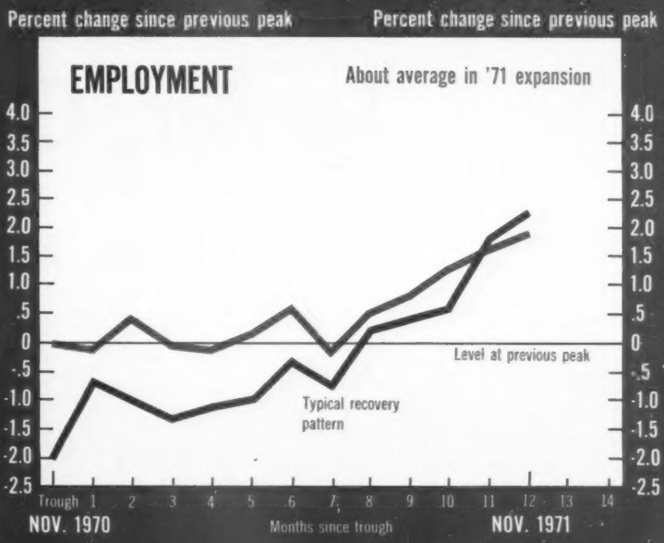
With industrial production likely to accelerate, and the other major sectors still in a strong uptrend, it is not surprising that most economists are forecasting a banner year in 1972.

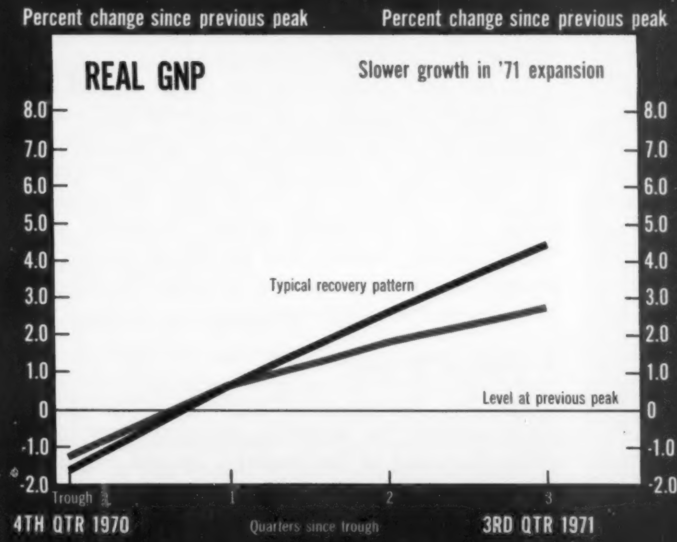
Latest Indicators

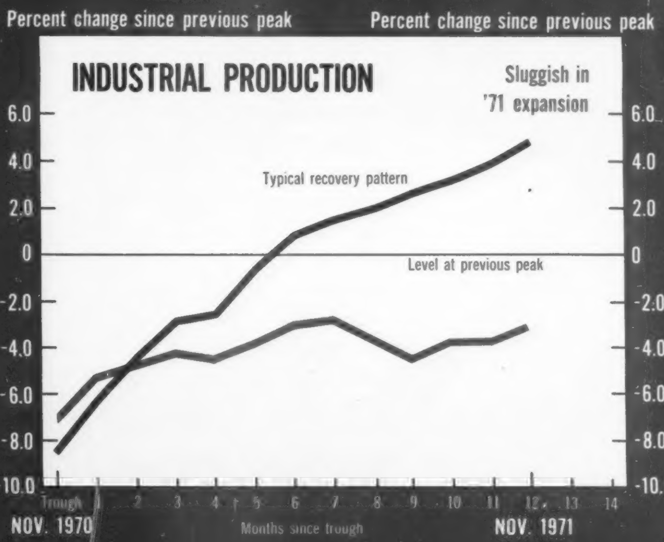












Commerce Today
Vol. II, No. 6
December 27, 1971

New Year Ushers In New Time Scale Important To Air, Oil Industries

More Uniform Atomic Second Affects Airlines' Collision Avoidance System, Ocean Navigation

The coming of leap year will usher in the "leap second," which henceforth will be a vital element in determining what time it is, a development of importance to the nation's commerce.

Beginning with 1972, a new time scale will go into effect based on the atomic second rather than the traditional second geared to the rotation of the earth.

The change will be significant to some degree with respect to efforts to develop a collision avoidance system for airliners and other planes, and also will affect navigation and possibly off-shore oil drilling in a certain measure.

The atomic second is more uniform than the earth second and shorter by thirty-billionths of an earth second. Obviously, measurements so extremely small are far beyond the bounds of usual human experience. However, the new time scale is of great importance in the world of science, which must depend upon very high precision in many areas of work.

The new scale has been agreed upon by the International Radio Consultative Committee, representing all major scientific nations, including the U.S. Participants in the group include members of the Time and Frequency Division of Commerce's National Bureau of Standards.

In the new time scale the "leap second" will become a factor in the occasional adjustment of time. Whenever the time based on the scale reaches a maximum of seven-tenths of a second slower or faster than the time based on the old earth second standard, a "leap" atomic second will be added or subtracted, as the case may be, to bring the time in line with the earth's rotation.

A second a year

For the Bureau of Standards, this will mean setting the Bureau's superbly precise clocks forward or backward a second about once a year. For the great mass of people, whose timepieces often may be several seconds or even minutes off, the change will make no noticeable difference. However, a new unit of time interval will be in effect by which all time is measured.

Conversion to the atomic second will affect efforts to develop a collision avoidance system for planes because of the high importance of a uniform time pattern that comes as near to absolute accuracy as is possible in the present state of the art.

Airlines and the Federal Aviation Administration (FAA) are attempting to work out an effective collision avoidance plan, which obviously would be significant in the present era of increasing air traffic and high-speed jet planes. At present, collision avoidance is largely in the hands of the air traffic controllers, who for the greater part have been remarkably effective in preventing mid-air crashes, especially in view of the rising air traffic volume.

Ground station network

The FAA is undertaking, as one approach to the collision avoidance problem, to develop a ground station network to provide high precision time signals to planes equipped with precision clocks and small and relatively inexpensive computers. The ground station network would beam the precise time to planes, based on the atomic second. The system, the FAA anticipates, would be economical, since planes would be furnished continually with accurate time without having to carry highly expensive clocks. Also the time would be uniform for airliners and all other planes participating in the system.

The planes, on their part, would transmit synchronized signals, based on the precise time, which other planes would use to ascertain whether a collision hazard existed. The signals would be synchronized down to an accuracy level of less than a millionth of a second. The process would be intricate, involving complex collision geometry and the use of computers. However, the system, in effective operation, would enable approaching planes to make the maneuvers necessary to avoid a collision.

Conflict of interest

So far as navigation is concerned, a certain conflict of interest exists between physicists and mariners, because ships upon the seas have to accommodate themselves to the rotation of the earth. Thus navigators in some cases may be inclined to hold to earth time rather than atomic time, although in most

DRILLERS AFFECTED—*Offshore oil drillers will be affected in some measure by the shift to atomic time to the extent that they depend upon accurate time to ascertain location and rely in some cases upon precise time to know where to drill.*

NAVIGATION TIME—*For those highly specialized navigators on the high seas who need it, stations broadcasting the atomic time signals will send out a numerical correction necessary to make the broadcast time correspond to the earth time. The navigator also needs precise time to determine his location.*

cases the latter, adjusted periodically by use of the "leap second," will suffice.

Under the new system, for those highly specialized navigators who need it, stations broadcasting the atomic time signals will send out a numerical correction necessary to make the broadcast time correspond to the earth time. In this way, navigators can continue to use the standard time broadcasts to check their chronometers as they have been accustomed to doing for years.

Time is of high importance in navigation and other operations requiring precision in the location of positions on uncharted water courses. Since location readings vary greatly with time, it is a vital factor in determining locations. For example, a navigator needs to know the precise time in order to determine where his ship is on the high seas and to keep on course.

Offshore oil drillers, to the extent that they depend upon accurate time to ascertain location, may rely in some cases upon accurate time to know where to drill. Thus they will be affected in some measure by the shift to atomic time.

Two primary factors

The decision to change to atomic time has been due to two primary factors. One is that over the long run the earth gradually is slowing down. The other is that the slowing down process is not constant, because in certain periods the earth's rotation will slow for some years, and then it may turn around and speed up. Scientists tell us that the earth rotated about 14 percent faster 500 million years ago, and that at present it is slowing at such a rate that a year becomes one second longer every 200 years. However, earth time is now about 10 seconds later relative to atomic time than it was in 1958, and this short-term slowdown may possibly be reversed in coming years.

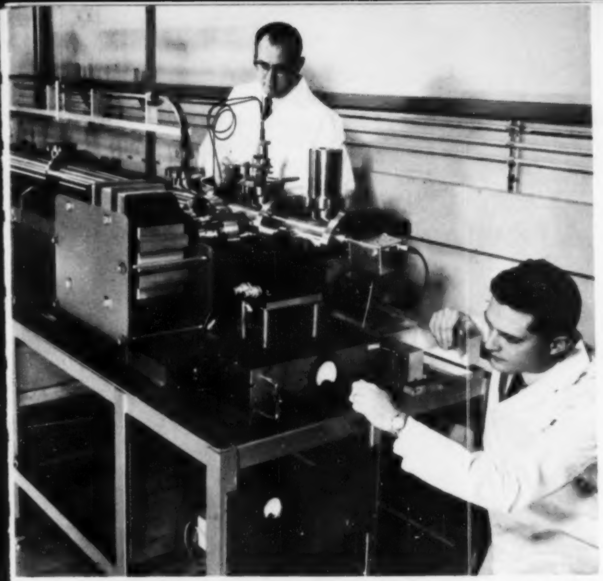
What causes these temporary slowdowns and accelerations in the rotation of the earth is not well understood. Speculation is that they may be due to tidal action, winds, earthquakes, and even to the molten currents in the center of the earth.

In any event, with the earth slowing down by 10 seconds in the last 13 years, it is clear that a 24-hour day of 86,400 seconds in the year 1971 does not consist of the same seconds as a comparable day in 1958, based on earth time. The 1971 seconds are longer, and even though they are only minutely longer, the varying seconds are not satisfactory in today's scientific age that relies in such a high degree on highly precise time measurements.

Inconstant rotation

Discontent with the rotation of the earth as a primary standard of time began in the late Nineteenth Century when astronomers began to suspect that the rotation rate was not constant. Scientists wanted to find a second that would be the same year in and year out. This would mean measuring time by some constant phenomenon or motion.

Atomic scientists found such a phenomenon in the natural oscillation of atoms. The next step was to build a device to count the incredibly rapid atomic oscillations. When this was accomplished, an atomic clock had been achieved.



ATOMIC CLOCK—*This is an atomic clock built at the Boulder, Colo., Laboratories of the Bureau of Standards which brought a new era of timekeeping. With such devices, scientists are now able to keep time that is ten thousand times more uniform than earth time. They are a major aid to metrologists.*

When the Bureau of Standards built the first atomic clock in 1948, a new era of timekeeping was born. Scientists at the Bureau and in other countries continued their experiments, building better and better atomic clocks, until they were able to keep time that was at least ten thousand times more uniform than earth time.

Clocks thus based on the highly accurate atomic second were a major aid to metrologists, who work in the field of weights and measures, and therefore use the second as a basic unit in measuring frequencies.

Efforts to develop an effective collision avoidance system for airliners and other planes belong in this area of work. The improved measurement of frequencies has resulted in advances in the development of many kinds of electronic devices, including television, computers and radar.

Nevertheless, all mankind used the earth's motion as the primary timekeeper until October, 1967, when the General Conference of Weights and Measures adopted the atomic second as the international standard for time interval. Because of the conflict of interest between scientists and navigators, a double standard was adopted, however. Standard time of day, known as Universal Time, continued to be determined by the rotation of the earth. In order to use atomic clocks to keep the time of day, it was necessary to lengthen or offset each second slightly to make it correspond to the earth's rotation. This offset-atomic time was designated as Coordinated Universal Time, and was generated by the Bureau of Standards and other laboratories so that they could use their atomic clocks to keep approximate earth time.

Under the new time scale, there will be no offset of clock rates. All time will be based on atomic seconds, and minutes and hours all will be atomic time length. Clocks will simply be reset when they get up to a maximum of seven-tenths of a second ahead of or behind the earth.

In this way, stations which broadcast accurate time signals, such as Station WWV of the Bureau of Standards, will never be more than seven-tenths of a second out of synchronization with the rotation of the earth. The new system also will be called Coordinated Universal Time.

The atomic second at present is determined by the oscillations of cesium, a silver-white, soft, ductile, metallic substance which is the most electropositive element known. By definition, this second spans 9,192,631,770 oscillations of the cesium atom. Scientists will continue trying to improve the stability of atomic clocks, possibly by using another element, such as hydrogen.

—*National Bureau of Standards*

COLLISION AVOIDANCE—*One approach to the collision avoidance problem of aircraft that the Federal Aviation Administration is attempting to work out is development of a ground station network to provide high precision time signals to planes equipped with precision clocks and small and relatively inexpensive computers. Precise time would be based upon the atomic second.*

Talks In Sweden Explore Trade Effects Of EEC Expansion, U.S. Actions

Swedish Officials Reaffirm Traditionally Friendly Commercial Links In Discussions With U.S. Group

Swedish leaders shaping their country's trade policies toward an enlarged European Common Market and measuring the effect of the U.S. import surcharge then in force discussed these problems and opportunities decently with Secretary of Commerce Maurice H. Stans.

During a Nov. 18-19 visit to Stockholm, Secretary Stans received a warm welcome from Government and business leaders. The two-day stay in the Swedish capital was his first stop on a mission that took him also to the USSR and Poland. Accompanying the Secretary was Harold B. Scott, Assistant Secretary of Commerce for Domestic and International Business, and a small group of trade specialists from the Department's Bureau of International Commerce.

Secretary Stans discussed trade policy problems with principal officials, including Prime Minister Olof Palme, Commerce Minister Kjell-Olof Feldt, and Foreign Minister Krister Wickman. These talks provided an opportunity to reaffirm traditionally excellent U.S.-Swedish trade ties and to explore problems of mutual concern to the two countries.

The talks covered several aspects of President Nixon's economic measures affecting international trade and payments, particularly the temporary import surcharge. Secretary Stans took the opportunity to explain that the surcharge was a short-term measure to help restore competitive reciprocity in world trade. Swedish leaders had publicly ex-

This is the first of three reports on a mission that took Secretary Stans and a group of Commerce Department officials to Sweden, the Soviet Union and Poland in November and December. Subsequent articles will discuss the visits to the Soviet Union and Poland.

AT STOCKHOLM U.S. TRADE CENTER—*Secretary Stans listens to a sales presentation by A. R. DeLong (center), Vice President of Bellco Glass, Inc., Vineland, N.J., an exhibitor at the Instruments for Chemical and Physical Measurement and Research show at the U.S. Trade Center for Scandinavia. At rear are (from left) Trade Center official Nathan Stein, and Arden Chambers and Joseph E. Casson of Secretary Stans' staff. The Trade Center, one of eight worldwide, has been operating since 1965.*

pressed concern about certain aspects of the import surcharge and other international features of the New Economic Policy.

Secretary Stans also discussed with the Swedish leaders current developments relating to the European Economic Community. Sweden's relationship with an enlarged Common Market is its most crucial economic and political interest today. Assuming that the United Kingdom, Denmark and Norway become full members, approximately 60 percent of total Swedish trade will be with members of the enlarged EEC.

While Sweden has sought some type of affiliation with the EEC since 1961, it has always insisted that its relationship must be compatible with its traditional neutrality policy. In March, 1971, the Swedish Government rejected full membership on these grounds.

Sweden is now negotiating with the EEC for some type of trade arrangement other than full membership. Secretary Stans expressed U.S. concern over preferential trade agreements between the EEC and non-member countries which could jeopardize trade relations with the United States, and urged that Sweden take full consideration of U.S. interests in any negotiations with the EEC.

Met with business leaders

In addition to discussions with Swedish Government officials, Secretary Stans met with a group of top-level Swedish businessmen at American Ambassador Jerome H. Holland's residence in Stockholm. Present at the informal discussion were managing directors of such leading Swedish firms as Volvo (automobiles), Saab-Scania (automobiles, aircraft), Alfa Laval (machinery), ASEA (electrical equipment), and Hasselblad (photographic equipment). Among others present were the directors of the Federation of Swedish Industries, the Swedish General Export Association and leaders of the Swedish shipping industry.

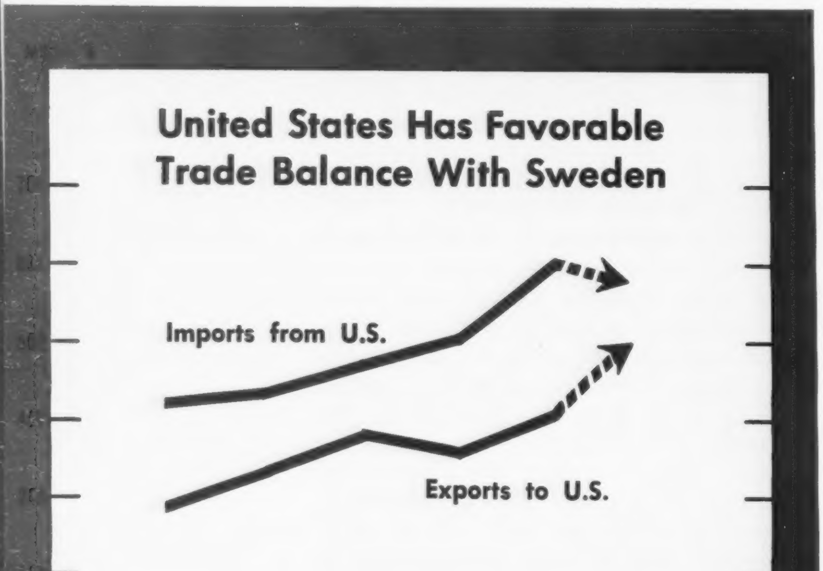
This discussion, like those with Swedish Government officials, was devoted largely to trade policy matters, particularly the import surcharge. The participants considered it an exceptionally frank and useful exchange of views.

Excellent trade relations

Secretary Stans' visit to Sweden may be viewed against a background of long-term rising trade between the two countries. Swedish imports from the United States in 1970 reached $608 million, a full 42 percent higher than the level in 1966. Machinery—particularly advanced cost-reducing equipment—is the biggest seller, accounting for about one third of U.S. sales to Sweden. U.S. instruments, commercial aircraft, chemicals, industrial raw materials, and foods are also important sales items.

U.S. trade with Sweden is facilitated by generally low Swedish tariffs and the presence of relatively few non-tariff trade barriers. The United States is Sweden's third largest supplier, surpassed only by Germany and the United Kingdom. In 1970 the U.S. share of the Swedish import market was 8.7 percent.

Sweden is noteworthy for its productive skills and technological achievements. It has the highest per capita Gross National Product in Europe and second highest in the world. Because the economy is so advanced, it requires high-technology equipment of the type in which U.S. manufacturing expertise excels. Sweden's general economic affluence also creates a pattern of consumer preferences—oriented toward high quality—similar to our own.



United States Has Favorable Trade Balance With Sweden

Sweden in turn finds in the United States an excellent market for many of its key manufactures. Swedish exports to the United States in 1970 totaled $406 million, 38 percent higher than the 1966 level. Automobiles are the largest Swedish export to the United States, accounting for almost 30 percent of the total; over 60,000 cars were shipped here last year. Swedish industrial machinery, electrical equipment, and specialty steels also find a solid market in the United States.

1971 Swedish imports declining

During 1971, Swedish imports from the United States failed to maintain the healthy annual growth of the past five years. In the January-August period, U.S. sales to Sweden actually were running 4 percent below the corresponding period in 1970. Declining U.S. sales are attributable to a sharp decline in Swedish import demand, caused by a current slowdown in Swedish economic activity.

The Swedish Gross National Product ($31 billion in 1970) is not expected to register any significant real increase in 1971. Unemployment, normally very low in Sweden, is at the highest level since the 1930s and comprises approximately 3 percent of the labor force.

This downturn began in late 1970. It was accompanied by severe inflationary pressures which induced the Government to tighten its fiscal and credit policy and to introduce a temporary price freeze.

Favorable elements in the economic picture are a recent slowdown in price increases and a turnaround of Sweden's international payments performance in 1971. The Swedish Government expects a current-accounts surplus of $140 million this year compared with a deficit of $320 million in 1970.

The Government is attempting to stimulate economic activity, without refueling inflation, through a series of measures, including a 20 percent corporate income tax credit on purchases of new machinery and equipment.

Another important stimulus has been the release of funds from the Countercyclical Investment Funds in which enterprises receive a tax advantage if they deposit part of their profits in boom years for later use.

The Swedish Ministry of Finance believes that the low point of the recession has been reached and that an upswing will begin early next year. The strength of the re-

CRAFTSMAN IN STEEL—*A worker handles hoop steel at the Munkfors plant of Uddeholms AB, which has been in business since 1668. (Swedish Information Service Photo)*

covery will depend in part on Swedish export performance.

Swedish Government incentives for industrial investment—such as the 20 percent corporate tax credit—will create demand for advanced capital equipment during the coming months.

Swedish industry is currently undergoing extensive rationalization; the more efficient branches are encouraged to modernize and expand operations, while inefficient groups are being merged into larger units or phased out altogether. The largest Swedish industries — machinery manufacturing, primary metals, shipbuilding, automobiles, electronics, paper products — are vitally interested in technological innovation to reduce costs and improve products. The chemical and petrochemical industries also are expected to experience rapid growth during the 1970s. The Swedish market for equipment needed by these industries is strong and shows every evidence of continued expansion.

Stans visits U.S. Trade Center

While in Stockholm the Secretary visited the U.S. Trade Center. This center, which opened in 1965, provides facilities for displaying and selling American products. The Secretary greeted the members of the staff and previewed the exhibition of Instruments for Chemical and Physical Measurement and Research. This exhibition, which opened on Nov. 22, later produced immediate and projected sales of $5.5 million.

Secretary Stans also spoke before the American Club in Stockholm. Talking to a group composed of many leading Swedish and American businessmen, the Secretary described the basic features of President Nixon's New Economic Policy.

He noted that the American economy by every indicator is strong and is pushing forward. He pointed out that the United States has two basic international economic goals: reform of the world monetary system and new fairness and equity in world trade.

Regarding the second of these goals, Secretary Stans noted that the United States is becoming increasingly concerned by a number of discriminatory practices that jeopardize U.S. exports. Examples are preferential trading arrangements, restrictive agricultural policies, import restraints, export subsidies, unpublished regulations regarding government procurement, tax discrimination, and a variety of other nontariff barriers.

Secretary Stans concluded by assuring his listeners that the United States is committed to international cooperation and freer trade among nations based on fair conditions. He called for restoration of the healthy long-term evolution and growth of international trade, and noted that he was en route to the Soviet Union to explore means of expanding trade and investment between the United States and the USSR.

MODERN FACILITIES—*Swedish industry is undergoing extensive modernizing, with some mergers for efficiency. Svenska Cellulosa, at Sundsvall, one of the largest paper and pulp manufacturers, uses TV monitors and electronic controls. (Swedish Information Service Photo)*

New Economic Gauge Will Affect Workers, Retirees And Business

Consumer Price Index Survey May Change Wages Of Four Million Employees, Future Marketing Plans

Formation of a new cost-of-living barometer, which will eventually affect four million workers, two million retired persons, health insurance programs, and consumer education, among other things, will be started in mid-January.

The barometer—a new Consumer Price Index representative of what the United States public buys in the way of goods and services—will touch all walks of life: the four million workers, affected by collective bargaining contracts providing for wage increases based upon gains in the CPI index, and the two million retirees whose pensions are adjusted to accord with changes in the index, for example.

In addition, the index will fulfill a wide range of needs for information about current consumer spending. Researchers will use the data to determine the size and nature of markets for particular products and services, and for indications of how buying habits change.

Business and labor groups will find the data useful in developing retirement and health insurance programs. Government agencies will study the information to formu-

BAROMETER'S PIPELINE—*A Census worker will gather cost-of-living data from sources most concerned with prices in the marketplace—a housewife and her son—for a new Consumer Price Index.*

PRESCRIPTIONS
DRUGS
SPECIALS
Have Fun with FLINTSTONES
sticker fun
color books
punch out books
puzzles
CHILDREN'S BOOKS
PHONOGRAPHS
15

DRUG STORE REFLECTS CHANGE—*The prescription drug counter (background) forms the heart of today's drug store. It is the focal point around which a vast assortment of other merchandise is arrayed. Patrons who come in for drugs often shop around and purchase other items before leaving.*

late social and economic policy, such as estimating the relative burdens of proposed items, setting up welfare programs, and measures to allay poverty.

Throws light

The information will also be used by those concerned with consumer education programs. The revised index will throw light on problems of certain segments of the population, such as low-income groups, the elderly, families with working wives and many others. The results are important criteria in evaluating assistance payments.

To obtain this barometer, 34,000 representative American families and individuals will be visited by trained interview seeking this information. Surveys of this kind have been conducted for more than 80 years to give a revised and updated Consumer Price Index—not only for a Federal Government tool, but for the business community to use in their planning and policy decisions.

This work will be carried out by Commerce's Bureau of the Census on behalf of the Bureau of Labor Statistics of the Department of Labor. It will be the latest Consumer Expenditure Survey, conducted periodically to obtain information for the purpose of revising the Consumer Price Index prepared and announced monthly by the Bureau of Labor Statistics. Heretofore the BLS has conducted the survey. The Census Bureau is acting as data collection agency for BLS for the first time.

The CPI is popularly known as the cost-of-living index, the barometer of what is happening to consumer prices.

The new survey will be conducted over a period of 27 months, extending into March, 1974.

About 180 interviewers will call upon people in 26 areas, urban and rural, in all parts of the nation. The families and individuals to be interviewed were scientifically selected by computer from a list of addresses compiled to provide a representive sample of all households in the nation.

The purpose of the survey is to determine such things as the following: food and beverages, clothing, fuels, utilities, major household equipment such as refrigerators and what changes have occurred in American consumer buying patterns since the last previous survey was made in 1961-62. The Consumer Price Index is based primarily on what the American public buys and the relative importance in its purchases of different goods and services.

Two survey groups

The 34,000 families and individuals involved in the latest survey will be divided into two groups of 17,000 each, and information will be sought from each group over a period of about 15 months. Each of these subgroups will be divided into two groups of about 8,500 each. From one of the latter segments data will be solicited at three-month intervals on purchases in the preceding three months, resulting in the members of this segment being interviewed five times.

Members of the other segment will receive a "diary" form to fill out, setting down in detail purchases made during the preceding week. This process will be repeated for the following week. After the participants have filled out the "diary" form for a two-week period they will not be interviewed again.

The survey period for the first group of 17,000 will extend from mid-January, 1972, through March, 1973, and will cover expenditures for the year 1972. The survey period for the second group of 17,000 will run from January, 1973, through March, 1974, and will cover expenditures for 1973.

At each stop, the person or persons most knowledgeable about expenditures of the household will be interviewed. The purpose of the "diary" aspect of the survey is to obtain information about the many small purchases, such as food and personal care items, that people cannot be expected to recall over a three-month period.

Individuals interviewed will be asked to provide detailed information on goods and services purchased. The answers will be used to update the CPI "market basket," or the list of goods and services priced for the index, and to revise the relative importance of each of these items. The current CPI "market basket," based on the survey conducted in 1961-62, embraces about 400 items. Persons interviewed will include urban and rural wage earners and clerical workers.

Questions will be directed to purchases for

FOOD IS A BARGAIN

COST IN MARKET PLACE—*A Silver Spring, Md., woman*

CASUAL CONSUMER—*A University of Oregon student relaxes as he browses through book selection.*

surveys fresh vegetables in neighborhood market.

washing machines, house furnishings, cars and other vehicles, insurance, medical services, school tuition and books, alterations and repairs to the house, household help, out-of-town trips and vacations. Other questions will relate to such subjects as rent, value of real estate owned, mortgage payments, debts, work experience and income. In brief, the survey will cover most expenditures by the household during the survey period, as well as income, assets, and liabilities.

Participation in the survey will be entirely voluntary on the part of the persons selected. The Census Bureau, however, looks upon the operation as a chance for service to the nation, since each family or person selected will be representative of thousands of others.

Because of the importance of the data, the Census Bureau and BLS have voiced the hope that the persons selected to participate will cooperate fully and willingly, so that the data obtained will be accurate and complete. The Census Bureau says that all information which would permit identification of a family or individual will be held in strict confidence, will be used only for the purpose of assembling representative data, and will not be disclosed or released for any purposes.

—*Bureau of the Census*

COST OF LIVING—*Homes figure heavily in every family's cost-of-living. A Census worker gets the facts from a home builder on the scene at a suburban construction site in a typical census survey.*

DOMESTIC BUSINESS REPORT

- NAB job pledges showing results
- Reorganization in statistical agencies
- New support for minority firms
- Concept of mobile homes changing
- Apartments renting on completion

Veterans' Job Hunt Gaining Momentum

Former serviceman Bob Takekawa found the world "outside" U.S. Army green is no bed of roses. The 23-year-old Bakersfield, Calif., resident, like countless thousands of returning veterans, found jobs almost nonexistent. Particularly for young men who possessed few skills before they were inducted.

Chances slim

"My chances are the same as any other civilian right now, except his are better because he has the experience on me," said Takekawa as he completed volume after volume of job applications and tramped from one job interview to another.

Through a manpower consortium backed by the National Alliance of Businessmen, Takekawa landed a job as a trainee bookeeper-salesman for C. C. Douglass Manufacturing and Sales. The program pays extra costs to train unemployed.

His $2.50 an hour starting wages salvaged a family of four from despair and the unemployment roles and gave Takekawa the incentive to look toward his civilian future with optimism.

Takekawa's is among the early success stories of a movement which has stirred the sensitivity and support of businessmen throughout the Nation. The campaign to find Jobs for Veterans.

Joining that campaign, the National Alliance of Businessmen pledged to President Nixon to find 100,000 jobs for returning Vietnam-era veterans, in addition to the organization's already heavy commitment to find job opportunities for the disadvantaged worker.

NAB's technique is businessmen talking to businessmen. From its 160 metro offices executives on loan from all areas of industry and government are given one day of training in job solicitation and are dispatched to area firms in search of job pledges.

In the first month of NAB solicitations 35,968 pledges of jobs for veterans were received and 13,664 veterans actually placed on jobs.

The Alliance keeps track of the number of jobs pledged, the number of persons placed in these jobs and the number of persons still on the job.

"We are off to a good start but we still have a long way to go," a NAB national staff member remarked.

The NAB veterans program encompasses all veterans who need help, whether skilled or unskilled. But the crux of the veterans unemployment problem is men who need the same kind of help as the disadvantaged NAB has worked with in the past. That is, younger veterans, the less educated, those who lack civilian work experience, and those who come from and return to the inner cities.

On the national and local levels, NAB works closely with the Veterans Administration and the National Jobs for Veterans Committee.

"This new veterans campaign will give the NAB a great sales and marketing opportunity," William C. Woodward, NAB president, stated, "Employers recognize that veterans deserve jobs—all veterans, from skilled technicians to the front line soldiers who have borne the burden of combat.

Special veteran qualities

"They recognize that veterans bring special qualities—that even those who lack civilian work experience have discipline, maturity, and the ability to learn from instruction.

"Any employers—like most Americans—are patriotic people who want to help men who have served their country.

"We are confident that employers will respond readily to this program—that they will provide both job opportunities and the loaned executives our metro offices will need to take this pledge campaign to every employer in their area," Woodward contined.

"We have ahead of us the opportunity to help our country meet an immediate national problem," Woodward concluded, "to prevent veterans who came from disadvantaged backgrounds from slipping back into that category; to see that all our returning servicemen have job opportunities fitting of the time, the hardships, and the dangers they have undergone."

NAB's solicitations are on behalf of the disadvantaged and the veteran simultaneously. The Employment service handles actual placing of veterans on the job. In addition to the businessman to businessman approach, NAB supports job training programs, job fairs and other hire-the-vet programs.

NAB, under an agreement with the Labor Department, is hiring 150 veteran job representatives to join its job finding activities. The new staffers, all Vietnam era veterans, will be assigned to local offices that have a "demonstrated need" for their use. They will serve as liaisons to government and private agencies, service and minority groups, and other organizations concerned with veteran unemployment.

—*Jobs for Veterans Committee*

lass
C.C. Douglass Mfg. & Sales
TRUCK BODY Mfg.
U92 419

SOMETHING TO WORK AT—*A happy Bob Takekawa looks over a custom truck body built by C. C. Douglass Manufacturing and Sales, which hired him for on-the-job training in the firm. Douglass is part of the Greater Bakersfield Chamber of Commerce JOBS Consortium, supported by the National Alliance of Businessmen.*

VETERAN NEAR DESPAIR—*Bob Takekawa, typical of the despairing Vietnam era veteran who returns to a tight civilian job market, explains his fruitless efforts to Glenn R. Chase (left), veterans employment representative in Bakersfield, Calif.*

Statistical Agencies To Reorganize To Give Business Better Service

Industrial reports for which business has looked to the Commerce Department's Bureau of Domestic Commerce, and Export-Import Indexes and Statistical Reports on U.S. trade which formerly came from the Department's Bureau of International Commerce, will originate from a new agency after the first of the year.

A reorganization

The new agency is the Social and Economic Statistics Administration, and it will consolidate the Department's principal statistical offices—the Census Bureau and the Office of Business Economics—into an organization which will be more responsive to the needs of business, labor, and government.

Secretary Stans, who announced the reorganization will take effect Jan. 1, said the move represents a step toward the President's proposed Department of Economic Affairs and "strengthens the statistical systems in the Department (of Commerce) and in the Executive Branch."

"It will strengthen both analysis and collection and bring Commerce closer into conformity with the Office of Management and Budget guidelines," Secretary Stans stated, "It creates an organization which will be more responsive to the statistical requirements of government, business, labor, and the public, and will do this without cost increases, operational disruptions or employee hardships."

The new organization consolidates the Census Bureau and OBE under Dr. Harold C. Passer, Assistant Secretary for Economic Affairs, who has also been designated Administrator of SESA. He will continue to be Secretary Stans' principal economic adviser. Census and OBE have been under the supervision of the Assistant Secretary for Economic Affairs since the establishment of that position in 1963.

OBE is being redesignated the Bureau of Economic Analysis and will assume the following analytical and analytic-related work will be transferred from the Census Bureau:

—The statistical indicators program including the issuance of Business Conditions Digest and related work.

—The special analyses of economic and social conditions in various foreign countries.

Census Bureau changes

To bring the Census Bureau, whose name is retained, into closer conformity to the Office of Management and Budget guidelines, the following survey activities will be assigned to the Bureau:

—Sales Expectations and Travel and Transportation survey activities from the present OBE.

—All remaining industrial surveys now performed by the Department's Bureau of Domestic Commerce.

—Export-Import Indexes and Statistical Reports on U.S. trade from the Department's Bureau of International Commerce.

"Benefits from the new organization are being obtained by moving Department of Commerce statistical activities in closer conformity with OMB guidelines," Dr. Passer commented. He said it will establish a strong structure for better program coordination of these two elements and for assuring a broad approach to Department statistical activities.

Dr. Passer said consolidated operation of SESA is facilitated by moving the administrative functions of Census and OBE directly under the Administrator and by creating a central review staff with responsibilities in the area of program planning.

The new structure will provide a better basis for developing and pursuing a broader statistical goal for Commerce, a stronger managerial framework for integrated planning and coordination of general purpose statistical programs, an increased capacity for career planning, a wider scope for professional development, and greater flexibility in the utilization of professional skills.

Dr. George Brown continues as director of the Census Bureau. Dr. George Jaszi, director of OBE, will become director of the Bureau of Economic Analysis.

—Office of the Secretary

Forty-Four Percent 'To Hold The Line' On Price Increases

"We intend to maintain current prices until they hurt," an official of one of the Nation's biggest businesses told the Price Commission.

G. Jackson Grayson, chairman of the Price Commission, said that in a survey of 1,500 companies, 44 percent of them gave assurances they would try to "hold the line" on price increases. About 40 percent planned to ask for increases.

While many of the companies were "determined" to avoid increases, Grayson said, they expressed "concern over the impact increased costs could have on their current plans."

"This concern is completely justified and it underscores the absolute necessity for every sector of the economy to cooperate in our common battle against inflation."

He sent telegrams to the Nation's 1,500 largest companies asking their intentions. He said he received 1,000 replies so far.

Grayson was "highly encouraged" by the response.

None of the companies was identified.

WAREHOUSE REFLECTS GROWTH—*A worker stores parts manufactured by the minority-owned AMB Co., Inc., of Albuquerque, N. M. Joseph and Abernicio Sisneros, Spanish-speaking businessmen, started the firm in 1963 as a small appliance sales and repair service. Today it has progressed to a sheet metal forming company which manufactures component products for heating and air conditioning duct systems.*

New Support On Its Way To Help Nation's Minority-Controlled Firms

Minority-controlled firms showing growth potential but lacking development capital will find support in a new $5 million venture capital company.

National investment

The Boston-based Urban National Corp. plans to invest nationally in minority-controlled businesses which have been in business for a year or more and whose managements have demonstrated the ability to survive as independent companies in the competitive marketplace.

Its initial equity capitalization will be provided by institutional investors representing both the black and white business communities. Its board of directors will be biracial.

Officials of the new company outlined plans to Secretary Stans who called the venture "another fine example of how the private sector and interested individuals can join with government in its effort to assist minorities in participating in America's competitive enterprise system."

Harmonious program

"The program of Urban National Corp.," R. Courtney Whitin Jr., president of the new company, stated, "is in complete harmony with Secretary Stans' minority business development efforts. Many members of the group had this in mind when they agreed to participate in Urban National."

"Typical investments," Whitin said, "will be in manufacturing firms and service businesses with established products and markets. Small family type businesses, community development projects and concerns whose products, processes or marketing plans cannot be reasonably tested will not be considered appropriate investments."

He said that as a rule investments will not be made unless there appears to be realistic prospects of a 15 percent or more annualized return on investment.

Progress means more funds

Urban National expects its initial investments will normally be in the range of $100,000 to $300,000. It will be prepared to invest further sums in companies whose progress warrants such support. Investments will be structured as notes with warrants or convertible debentures, which provide far greater security than equity positions would give.

Whitin stated that Urban National will not attempt to control its portfolio companies, but its management expects to work closely with all companies to develop and implement business plans which will include substantial growth and profitability.

A member of Urban National's staff will serve on the board of directors of each company and every effort will be made to find a local business executive with proven skills in the company's industry to add further strength to each company's board. Urban National's staff and resources of Price Waterhouse and Arthur D. Little, Inc., where appropriate, will be utilized to provide technical and managerial assistance to portfolio companies.

Whitin and Hobart Taylor Jr., also a director, and a partner in the Washington, D.C., law firm of Dawson, Quinn, Riddell, Taylor and Davis, met with Stans. Other officers include Samuel M. Ryburn, vice president; Nathaniel L. Clark, assistant vice president; Tull N. Gearreald Jr., assistant vice president and treasurer; and Kenneth H. Miller, assistant vice president and counsel.

—Office of Minority Business Enterprise

IMMOBILE MOBILITY—*Two residents of a mobile home park peddle down the streets of their community. 'Mobile homes' as a term may be a misnomer, since these large trailer-type units are rarely moved, as they are at least 32 feet long and eight feet wide. They have become a popular living unit for many Americans.*

Mobile Homes Numbers Growing—More Than 135 Percent In Ten Years

A large-scale boom is under way in the manufacture and sale of "mobile homes," the compact and often massive dwelling units that are installed in mobile homes parks, scattered individually over the countryside.

Shipments rising

A report by Commerce's Bureau of the Census shows that in September, 1971, shipments of mobile homes to dealers rose to a seasonally adjusted annual rate of 557,000 units, an all-time high and 29 percent over the September, 1970, annual rate.

The seasonally adjusted annual rate for mobile homes shipments was appreciably greater for each of the first nine months of 1971 than for the corresponding months of 1970. The rate is calculated from unadjusted shipments data provided by the Mobile Homes Manufacturers Association.

The 1970 census showed that 1,800,000 mobile homes were being used as living quarters as compared with 767,000 ten years before, an increase of 135 percent.

The term "mobile homes" in some degree is a misnomer, it is pointed out, since the homes actually are not as mobile as the name would indicate, although the concept remains. The expression applies to the large trailer-type units that are at least 32 feet long and eight feet wide. Trailers below this size are classed as recreational vehicles and are seen constantly on the highways.

In reality, the mobile homes now being manufactured average 60 feet long and 12 feet wide, and the average is growing. Some of the homes are 70 feet long and 14 or even 16 feet wide, although the latter width is a rarity. There are "double-wide" units consisting of two individual units 12 by 60 feet which are manufactured to lock together and interconnect in one home. Such "double-wide" units may contain three bedrooms, living room, kitchen, dinette, and two baths.

Special permits needed

To convey these mammoth trailers over the highways, it is necessary in each state in the Union to obtain a special permit, and to observe certain rules, such as moving them only between sunrise and sunset and never on week-ends. In every State in the Union, a permit may be obtained to move a 12-foot wide unit, or a double-wide unit of two 12-foot trailers disconnected and hauled separately. In 32 States a 14-foot wide unit may be moved on the highways, but only in Texas may a 16-foot wide unit be carried.

Thus, the owner of a 14-foot wide unit who desires to move his mobile home from one part of the country to another will have to confine his travel to those States that permit the passage on the highways of a unit that wide.

Ronald Jones, Washington Affairs Associate for the Mobile Homes Manufacturers Association, says that actually the average mobile home is installed to stay in one place for the greater part, and that the average owner of one of these homes doesn't move any more often than other average Americans, which is about once every five years.

Jones attributes the mobile home boom to certain favorable factors, such as economy, flexibility and ease in financing, and the mass development of large parks in which the homes may be installed.

The expansion of the mobile home market has been assisted in some measure by the Federal Housing Administration of the Department of Housing and Urban Development, which operates two insurance programs for mobile homes. Under one program, mortgages on mobile homes are insured, and under the other the mortgages on the parks in which mobile homes are located are insured.

Jones explains that the average mobile home of 12 by 60 feet will cost about $6,100, that a double-wide unit of two 12-foot sections usually will cost about $10,000, that down payments are relatively small, and that bankers and others providing mortgage money find the business profitable.

Mobile homes popular

"In the last three years," Jones says, "about 95 percent of all housing in the United States selling for less than $15,000 consists of mobile homes.

"The mobile home appeals in a large degree to the young and the elderly, that is, people under 30 or over 55. About 40 percent of all persons who buy mobile homes are 55 or over."

Land costs

The buyer of a mobile home who locates in an individual spot may have to pay for the land as well as the house, in which case he may have to add a few thousand dollars to the price of his home to acquire the land. But if he locates in a park he may pay rent on the land instead of acquiring it. The rent varies widely, ranging from as low as $30 a month to $75 or $100, depending on the area and location. A great many Americans are inclined to buy mobile homes just as others purchase conventional houses, acquiring both home and land.

—Census Bureau

A HOME ON WHEELS—*Mobile homes now being manufactured average 60 feet long and 12 feet wide, with the average still growing. To convey these mammoth trailers over U.S. highways, it is necessary to obtain special permits in each state traveled. Further, certain rules—such as no movement on weekends—often have to be observed. Trailers shorter than 32 feet now are termed recreational vehicles and do not fall under these rulings. These vehicles are a common sight on U.S. highways.*

Inactive Fleet Increases Again

The oceangoing U.S. merchant fleet had 567 vessels of 1,000 gross tons or more Nov. 1, according to the Maritime Administration's Merchant Marine Data Sheet.

Total number of vessels in the privately-owned fleet is 725. From Oct. 1 there was a decrease of 37 active vessels and an increase of 31 inactive vessels in the privately-owned fleet. One ship was delivered from construction, two were to foreign flag and five were sold for scrap. This resulted in a net decrease of six vessels during Oct.

The Maritime Administration's active fleet remained at 21 while its inactive fleet decreased by 40 vessels which were sold for scrap. There are now 682 vessels in the government-owned fleet.

The total U.S. flag merchant fleet decreased by 46 to 1,407.

According to Andrew E. Gibson, Assistant Secretary of Commerce for Maritime Affairs, the sharp increase in inactive vessels for the period was the result of the strike situation.

—Maritime Administration

New housing units completed during October 1971 were estimated to total 171,100, slightly above the total for September and 19 percent higher than the total for October a year ago, according to the Census Bureau.

Preliminary statistics released by the Census Bureau and the Department of Housing and Urban Development show the number of privately owned units under construction at the end of October 1971 totaled 1,295,200. This is slightly above September's figure of 1,284,700 and 39 percent above October 1970.

These data do not include mobile home units.

MORE AND MORE—*A new survey reveals that 78,000 privately-financed apartment units were constructed during the April-June quarter of 1971—16,000 more than the preceding quarter showed. This represents an increase of nearly 26 percent.*

Joint Survey Finds Privately-Financed Apartments Renting Faster This Year

A joint survey conducted by Commerce's Bureau of the Census and the Department of Housing and Urban Development showed that 78,000 privately-financed apartments were constructed in the U.S. in the April-June quarter of 1971, as contrasted with 62,000 in the January-March quarter—an increase of nearly 26 percent.

More than half

The 78,000 apartments represented 56 percent of the 139,000 units constructed during the quarter in buildings of five or more apartments. Included were privately-owned housing subsidized by state and local governments, but not cooperatives and condominiums, furnished rental units, privately-built housing sold subsequent to completion to local public housing authorities, and all units in Federally-subsidized properties built under various programs of the Department of Housing and Urban Development.

According to the Census Bureau survey, 69 percent of the privately-financed apartments built in the April-June quarter were rented within three months after completion. This compared with 68 percent of those constructed in the January-March quarter.

Privately-financed increase

The number of privately-financed apartments built to rent for $175 to $199 a month increased from 13,563 in the January-March quarter to 20,250 in the April-June quarter, a gain of from 22 to 26 percent of the total. The number built to rent for $200 or more a month rose from 21,550 to 28,369, or from 35 to 36 percent of the total, yet still a drop from the 43 percent of the total constructed in the October-December quarter. However, only 2 percent of the apartments built in both quarters were offered for less than $125 a month.

Apartments built with two bedrooms increased in number from 31,986 in January-March to 42,479 in the April-June quarter, or from 52 to 54 percent of the total, while those including three bedrooms or more remained at seven percent of the total in both quarters.

—Census Bureau

Ombudsman For Business

Businessmen who need assistance in their dealings with the Federal Government now have a central office in Washington, D.C., to write or call for information, suggestions, or even for registering complaints—the Commerce Department Ombudsman for Business.

All inquiries should be addressed to the Ombudsman, Thomas E. Drumm, Jr., Special Assistant to the Secretary, U.S. Department of Commerce, Washington, D.C. 20230, or call 202-967-3178.

Franchisors Being Alerted To New Company Data Book

A data book which has had wide readership in its six years of annual editions is getting ready for its seventh printing, according to the Commerce Department's Bureau of Domestic Commerce.

The volume, *Franchise Company Data for Opportunities in Business*, is published annually in support of the Department's overall program to promote sound business growth and to assist in establishing minority group businesses.

Franchisors are invited to participate. Those participating in past editions have made a positive contribution to assisting minorities and expanding the economic base in the miority community.

To be included in the seventh annual edition, a franchisor must agree not to discriminate on the basis of race, sex, color, creed or national origin in making franchising arrangements.

Franchisors interested in being included in the publication can write to the Service Industries Division, BDC, U.S. Department of Commerce, Washington, D.C., 20230, requesting additional information. The deadline for participation in the Data Book is Jan. 10, 1972.

—Bureau of Domestic Commerce

How To Aid Minorities In Business

Fourteen ways in which the Nation's citizens, acting individually or through business and social organizations, may assist minority enterprise to achieve its full economic potential, are described in a booklet prepared by Commerce's Office of Minority Business Enterprise.

Stressing the importance

In the foreword, Secretary of Commerce Maurice H. Stans stresses the importance of minority enterprise, pointing out that "it is profitable business, it helps build our economy, it strengthens that segment of our citizenry which has been truly disadvantaged in economic opportunity, it serves a large and growing market."

The 14 ways in which citizens may aid minority enterprise follow:

—Through the Minority Enterprise Small Business Investment Company (MESBIC), a for-profiit corporation chartered by the State and licensed by the Small Business Administration (SBA), and privately capitalized by one or a group of individuals, corporations or organized groups. The minimum unencumbered capital is $150,000. In addition to special tax considerations, a two-for-one matching, low-interest, long-term loan may be obtained from the Small Business Administration (SBA).

—Through Local Development Companies (LDCs), which may be organized as a profit or non-profit corporation to acquire land, build or expand facilities, purchase machinery and equipment, develop shopping centers and fund facilities for minority businesses. Using as little as 10 percent equity, LDCs may obtain up to $350,000 in SBA long-term facility loans for each small business assisted.

—Through direct investments. Some funding sources are investing directly in minority-owned businesses or are guaranteeing loans made by others to minority businesses.

—Through guarantee pools, normally established by providing funds, assets, or capital notes to lending institutions as an incentive to the banks to make more minority business loans and as a guarantee of repayment on loans requiring additional security.

—Through joint ventures with minority businessmen who have a unique understanding of the $30 billion minority market.

—Through the corporate "spinoff" used to capitalize a growing product line or for a variety of other purposes.

—Through franchises and dealerships.

—Through deposits in minority-owned banks. This is one means by which corporations may directly affect bank loan availability to minority enterprise.

—Through the action of depositors in encouraging their banks to expand their minority loan programs. A growing number of larger banks have responded to this need either on their own, through local community groups, or by utilizing the loan guarantee programs of the SBA.

—Through minority procurement. The number of substantial minority manufacturing, processing, packaging, and service businesses is increasing and many have full competitive capabilities for local and national markets.

—Through volunteer counseling, which often is the most productive and efficient way to accomplish a transfer of skills to the minority businessman.

—Through assistance to minority-based trade associations by sharing operational know-how, providing marketing advice, and furnishing information about supply sources and essential operating techniques.

—Through transfer of know-how to the minority business community.

—Through management training.

(Additional information and assistance may be obtained from John L. Jenkins, Director of the Office of Minority Business Enterprise, U. S. Department of Commerce, Washington, D.C. 20230.)

Calendar For Businessmen

Jan. 14—Savannah, Ga.—Dedication of Eisenhower Peace Center. Andrew E. Gibson, Assistant Secretary of Commerce for Maritime Affairs, will represent Secretary Stans.

Jan. 16-19—Miami Beach—1972 National Exposition for Food Processors, sponsored by the Food Processing Machinery and Supplies Association. For information, sponsor's executive office, 7758 Wisconsin Ave., Washington, D.C., 20014 (301-656-5724).

Jan. 19—Washington, D. C.—Pre-Business Workshop, sponsored by Washington Regional Office, Small Business Administration and the Small Business Guidance and Development Center. for information, SBG & DC, 202-635-7447.

Jan. 23-28—Tucson, Ariz.—Basic Industrial Development Course, University of Arizona, accredited by the American Industrial Development Council. For information, John Swenson, coordinator of business conference, Room 112, B.P.A., University of Arizona, Tucson, 85721.

Jan. 27-29—Baltimore—National Black Enterprise Conference, sponsored by Congressional Black Caucus, at Morgan State College. For information, Black Caucus, 202-546-3425.

SCIENCE & TECHNOLOGY REPORT

- Scientists find new commercial lobster beds
- Sea level rise poses problem to industry
- 'Outdoor Ethics Code' suggested by report
- Fish-processing devices seen boon to industry
- Florida cloud seeding effects more rainfall
- Patents of special interest

Scientists Find Commercial Lobster Beds

An unexpected concentration of northern lobster, one of the world's most expensive seafoods, has been found by Government scientists along the central coast of Maine in an area unknown before as a source of this delectable food.

Scientists estimate there is a harvestable amount.

The find resulted from the first operational project in the Manned Undersea Science and Technology (MUS&T) program operated by the National Marine Fisheries Service of Commerce's National Oceanic and Atmospheric Administration.

Led by Dr. Richard A. Cooper, scientists from the Boothbay Biological Laboratory, a part of the Northeast Fisheries Center headquartered in Woods Hole, Mass., made 33 dives in the PC-8, a two-man transparent-nosed submersible leased from Perry Oceanographics, Inc., in the course of their investigation.

Although their initial interest was in a study of herring spawning, the scientists quickly expanded their work to include other commercially important species.

The commercial-sized population of lobster was discovered in muddy, estuarine channels at the bottom of canyons near the Sheepscot and Boothbay estuaries in 150 to 250 feet of water.

All adults

All the lobsters found were adult, and many were shedding in colder waters (48 degrees) than had heretofore been known.

Other finds of interest to the lobster industry as well as the scientists:

- No juvenile lobsters were

A FERTILE BREED—*A 15-inch female lobster lays about 40,000 eggs. Under natural conditions, about 99 percent of this potential crop will be eaten by fish and other aquatic animal predators.*

observed in depths greater than about 150 feet, and with one lone exception, no lobsters were found in depths greater than 250 feet, even in areas otherwise suitable for lobster territory.

- The lone lobster found in deeper waters, a two-pound specimen in 750 feet of water, showed no sign of distress when taken by the mechanical arm of the PC-8 and brought rapidly to the surface, suggesting that lobsters do not suffer the "bends" as some fishermen believe.
- Sunlight was visible at depths as great as 750 feet when the submersible's lights were turned off, suggesting that seasonal migration of lobsters may be partly aided through light penetration to the sea floor.

Lobster is the most valuable single fishery product of the Atlantic coast. Demand exceeds supply to the extent that imports average more than half as much as the domestic catch. The resulting high prices have renewed interest in developing methods of lobster culture.

Since early 1969, the National Marine Fisheries Service Biological Laboratory has been conducting research to develop economically-feasible techniques for commercial culture operations.

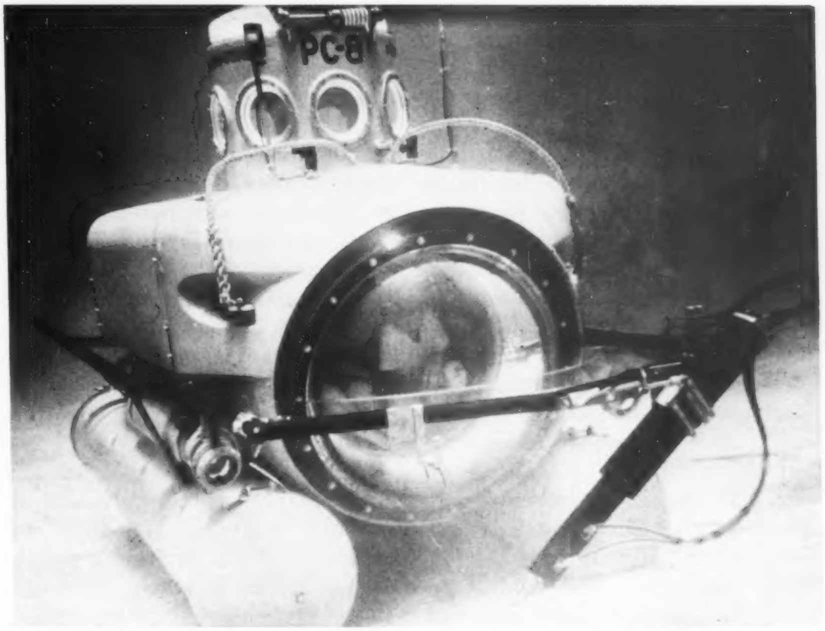
Controlled conditions

There is no doubt that lobsters can be maintained under controlled conditions. Each year, millions are held in tidal ponds, lobster cars, or tanks of circulating sea water for as long as six months before shipment to market. Newly hatched larvae and juvenile lobsters also can be maintained under artificial conditions.

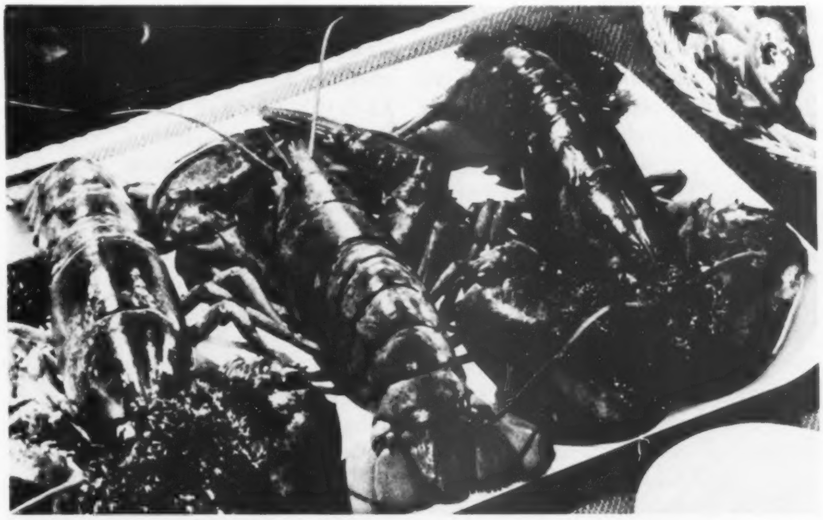
Although it is not difficult to rear a few lobsters to commercial size on an experimental basis, there are factors that could prevent profitable commercial culture at present.

Some of the more important problems result from the biology of lobsters: they are slow-growing, cannibalistic, and territorial. Maintaining and rearing large numbers in crowded conditions is particularly difficult. High mortalities can be caused by improper diet, bacterial, or parasitic diseases, failure to molt successfully, cannibalism, or unfavorable environmental conditions. Nutritional, biological, and environmental requirements of the lobsters need to be determined.

In the past few years, biologists at the Massachusetts State Lobster Hatchery have successfully mated scores of lobsters in captivity, and have hatched thousands of second-generation offspring. The success of selective breeding experiments suggests that further research may soon make it possible



UNDERWATER SNOOPER—*This submarine, the Perry PC-8, has been used by scientists to locate new concentrations of northern lobster off the Maine coast. It has also been used for pollution-control studies off New York City and New Jersey.*



DELECTABLE EYEFULL—*Northern lobster, one of the world's most expensive seafoods, is enjoyed coast to coast to such an extent that U.S. demand exceeds supply. Lobster imports average more than half as much as the domestic catch. Recent new beds found by scientists off the Maine coast may help to swell the required supply.*

to produce fast-growing, disease-resistant lobsters particularly suited for artificial culture, and having commercially desirable characteristics.

The second biological attribute which offers possibilities for future culture success is the favorable effect of increased temperature on the lobster's metabolism throughout its life cycle. Recent work at the Boothbay Harbor Laboratory has demonstrated the case of accelerating hatching by using warm water. In nature, females carry their eggs about 10 months, but in warm water (up to 80 degrees), the egg development rate increases and larvae hatch in less than half the normal time.

An academic and industrial group in southern California has been studying the use of warm water effluent from coastal power plants to accelerate the hatching and growing of northern lobster. This research is being conducted in a laboratory on the grounds of San Diego Gas & Electric Company's power plant. San Diego State College, along with the State of California and the utility company, is cooperating in the lobsters development program.

Researchers at Oregon State University are studying the effect of water temperature on survival of northern lobster larvae, with a view to establishing a population in Oregon waters.

And the Department of Sea and Shore Fisheries of Maine is compiling and analyzing biological and environmental data from a coastal area subjected to warm water discharge from a power plant, to learn if the area is suitable for lobster rearing. *—NOAA*

Advisory Board Gains Four New Appointees

Four new members of the Commerce Technical Advisory Board have been appointed by Commerce Secretary Maurice H. Stans bringing the Board's membership to 21 leading scientists, engineers, executives, and educators.

New to the Board are Dr. Charles H. Burgess, a geologist and vice president-exploration, Kennecott Copper Corp., New York; Dr. Wytze Gorter, an economist and dean of the Graduate Division and director of research, University of Hawaii, Honolulu; John R. Kiely, a civil engineer and executive vice president, the Bechtel Corp., San Francisco; and Dr. William E. Shoupp, a physicist and vice president-research, Westinghouse Electric Corp., Pittsburgh.

In commending all the Board's members for their willingness to serve the Government without compensation, Secretary Stans said:

"In our increasingly complex society, where problems so often cut across many disciplines and require fresh and novel approaches, CTAB has had a marked impact on the technological policies and programs of this nation. I have recently asked its members to assist in developing new technological opportunities as part of President Nixon's comprehensive efforts to stimulate and apply technology to major social programs."

CTAB advises the Secretary on matters of technology and public policy and conducts studies of technological problems. More than a dozen studies have been published by the board.

James H. Wakelin, Jr., Assistant Secretary of Commerce for Science and Technology, serves as chairman of CTAB.

—Office of the Secretary

Fish Catch Figures To Be Gathered For Conservation

A two-month pilot household survey is to be begun in California by a New York City research firm to develop techniques for estimating fish catches by private anglers.

Audits and Surveys, Inc., has been contracted to do the work by the National Marine Fisheries Service (NMFS) of Commerce's National Oceanographic and Atmospheric Administration.

With literally millions of saltwater anglers fishing off U.S. shores, fisheries experts need the information as a basis for fish conservation measures.

Catch estimates obtained by the pilot survey will be checked against statistics routinely collected by the California Department of Fish and Game. If the techniques work, NMFS will use this method for nationwide surveys to gather the statistical information needed for conservation of marine game fish. The overall program is expected to get under way by 1973.

Formerly the Bureau of Commercial Fisheries in the Interior Department, NMFS is responsible for conservation of salt water sport fishes as well as commercial marine species.

Every five years Commerce's Census Bureau takes a National Survey of Hunting and Fishing sponsored by Interior's Bureau of Sport Fisheries and Wildlife. The survey is highly useful in determining broad trends, such as which geographic areas are more heavily hunted or fished, and the concentration of sportsmen at various levels of income. *—NOAA*

Heart Valve Designer Speaks To April Inventors' Congress

Carl C. Goosen, vice president of Lancer Scientific Corporation, and designer and producer of prosthetic heart valves while working with Dr. Christian Barnard in Cape Town, South Africa, will be the featured speaker at the sixth annual Inventors' Congress in Orlando, Fla., April 25-28.

The Inventors' Congress is held concurrently with the Florida Industries Exposition, the largest state show of industry in the nation. Visitors and exhibitors of the FIE are the persons most sought by inventors to examine their creations with a view toward development and marketing.

—Patent Office

Sea Level Rise Along Atlantic Coast Poses Problem To Industry, Resorts

Sea level has risen at an unprecedented rate averaging three inches since 1963 along the east coast between Maine and Virginia posing a problem to industry and resorts in that area, according to the report of a scientist of Commerce's National Oceanic and Atmospheric Administration.

He adds that the oceans are generally rising elsewhere along most shores of the U.S., but at a lesser rate.

Steacy D. Hicks, a physical oceanographer with NOAA's National Ocean Survey in Rockville, Md., bases his findings on a detailed study of sea level monitoring at 115 locations along the coasts of the U.S. by his agency and its predecessor, the Coast and Geodetic Survey.

Inundating the land

Scientists differ as to whether the sea is rising or the land is subsiding, but the practical effect is the same since the water is inundating the land to a greater extent than before. Many believe it is a combination of both, caused by a number of factors, including the melting of glaciers and the removal from the ground of increasingly large supplies of water and petroleum.

NOAA's study reveals that the sea has risen about one foot during the past 100 years on the Atlantic and Gulf of Mexico coasts. But Hicks emphasizes that since 1963 the sea has been rising at a faster rate than this—at least between Maine and Virginia, more than three feet a century.

There is geologic evidence that over the aeons since the earth evolved, the oceans have periodically risen and fallen. No one can foretell how long the present rise will continue.

Beginning in 1893 in New York, the Coast and Geodetic Survey installed and manned tide stations along the coasts of the U.S. to measure the sea level each hour around the clock until today there are 115. Forty-three have been operating continuously since at least 1940, and this has made it possible to establish a common series of readings for comparison over a lengthy period.

Hicks' study also reveals that:

- The sea level at Eugene Island, La. (near St. Charles, La.) has shown the greatest rate of increase over the past 30 years, slightly less than one-half inch annually. Since 1940, the sea level there has risen 1.2 feet. At Galveston, Texas, where records have been kept since 1910, the water has risen 1.27 feet, but at a rate of about one-half that at Eugene Island.
- Contrary to the rise elsewhere, the sea level at a number of locations in California, Oregon, Washington, and Alaska has shown a decrease since 1940. These include Los Angeles and Crescent City, Calif.; Astoria, Ore.; Neah Bay, Wash.; and Juneau, Sitka, and Yakutat, Alaska. The most pronounced drop in sea level has been recorded at Juneau, where the water has fallen almost 1.6 feet since 1940.
- During the past three to eight decades, during which sea level monitoring has been conducted at various sites along the coasts, the sea level of the Atlantic Ocean has risen from 4 to 11½ inches and on the Gulf of Mexico from 5 inches to 1.2 feet. The variance in the sea level on the Pacific coast has already been noted, but where an increase is indicated, the rise has been 2 to 7½ inches and the decline has been 2½ inches to 1½ feet.

—NOAA

RISING SEA LEVEL—*In the 39 years that the sea level has been monitored by the Government at Miami Beach, Fla., the level has risen 4.68 inches. The continued upward swing of the rate of rise poses a problem for such resorts and industry.*

'Outdoor Ethics Code' Suggested By Council Report

PRESERVING NATURAL BEAUTY—*Industries engaged in supplying products used in outdoor recreation areas have a large "stake" in clean water and the preservation of natural beauty since their very existence is dependent upon purchasers of their products finding the most pleasant surroundings in which to engage their pursuits.*

Manufacturers of outdoor recreational equipment should continue efforts to minimize adverse environmental effects from the use of their products and develop a "Code of Outdoor Ethics" for the public according to the latest report of the National Industrial Pollution Control Council.

The report, entitled "Land and Water Pollution from Recreational Use," is a product of the Leisure Sub-Council of NIPCC. It also suggests the Federal Government conduct an experimental program limiting access to some public lands and waterways to individuals passing prescribed tests on sound environmental practice.

Also recommended is the distribution of a self-help pollution analysis form to identify sources of industrial pollution and to determine what actions manufacturers of recreational equipment should take.

While calling on manufacturers of non-polluting products (golf clubs, tennis rackets, camping equipment, fishing and hunting gear) to contribute to "educational campaigns which are in the public and their own interest," a manual of "outdoor ethics" as well as conservation educational material would be "most helpful if carried on more extensively by these industries at the point of sale of their products."

Public education

In addition, says the report, the leisure industry "should actively encourage further attention to litter problems on the part of producers and marketers of products resulting in litter, as well as taking actions to minimize litter through public education.

The report observes that "what driver education courses in our schools have done to reduce highway safety problems could have its equivalent for recreational lands and waterways."

Noting that Government, the public and industry alike share responsibility for environmental protection of our public lands and waterways, the NIPCC Leisure Sub-Council report says the role of government is "probably the most important area for future action.

"Funds must be made available to bring existing state and Federal park and recreation areas up to an exemplary level. Treatment plants and other facilities should be models and set the standard for the private sector."

The report also notes that industries engaged in supplying products used in outdoor recreation areas have a large "stake" in clean water and the preservation of natural beauty since their very existence is dependent upon purchasers of their products "finding opportunities to engage in leisure pursuits in the most pleasant surroundings." To this end, recreational equipment manufacturers are asked to continue efforts to minimize any adverse environmental effects from their products.

The report can be purchased by check or money order from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. The price is 25¢ per copy. —*NIPCC*

Consumer Hearing Booklet Is Published

Practical, down-to-earth guidance on hearing and hearing aids is provided by the latest in a series of consumer booklets published by Commerce's National Bureau of Standards. Entitled "Facts About Hearing and Hearing Aids," the booklet was written by NBS scientist Edith Corliss and edited by James E. Payne "to help the consumer make informed decisions in the marketplace."

NBS Director Lewis M. Branscomb said of the new booklet:

"No effort has been spared in making this consumer booklet comprehensive, accurate, and fully informative in terms that can be readily understood by the layman. Key illustrations, for example, have been done by one of the nation's leading medical artists. We were careful throughout the preparation of this publication to address ourselves directly to the consumer's need for reliable information that he can use in protecting one of his most precious assets—his hearing."

From the opening chapter on "How You Hear" to the concluding material on hearing-aid costs, financial assistance, and regional test facilities information, the booklet provides details for all who are concerned about their hearing, and particularly for the more than 20 million Americans who suffer varying degrees of hearing impairment.

Included are sections dealing with such questions as the causes and treatment of hearing loss, effects of hearing disorders, deafness in the very young, what you can do about a hearing loss, the hearing aid, selecting a hearing aid, and common questions new hearing-aid users ask.

This is the fourth booklet in the Bureau's Consumer Information Series. It may be purchased from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, or from the nearest Commerce Department field office or Government book store. The booklet may also be obtained from Consumer Product Information, Washington, D.C. 20407. The price is 60 cents per copy.

—National Bureau of Standards

Fish-Processing Devices Seen Boon To Industry By Hiking Production

Mechanical fish-processing devices recently tested by National Marine Fisheries Service laboratories of Commerce's National Oceanic and Atmospheric Administration are seen as a possible multimillion dollar bonus to industry. They would also completely utilize harvested fishery resources and substantially increase seafood production.

The laboratories in Gloucester, Mass., and Seattle, Wash., conducted experiments with mechanical fish-flesh separators similar to those in use in Japan for some 20 years. They are designed to separate and recover fish flesh often wasted.

Repeated tests by NMFS have demonstrated that use of the separator increases the yield of edible fish flesh by 12 to 30 percent over the yield obtained from standard filleting techniques. Ordinary processing methods for market fish recover 25 to 30 percent edible flesh from whole fish.

When the separator is used, recovery rates range from 37 to 60 percent, depending upon species. At present this type of separator is used widely in this country by meat and poultry processing plants but acceptance has been limited among fish processors.

The device works by separating flesh from the skin and bone which remains after fillets have been removed. Adhered flesh is squeezed through the perforations on a stainless-steel drum. Skin and bones do not pass through the perforations. The process involves feeding this waste material from filleting or dressed small fish into a hopper and then into a machine where it is pressed between a belt and a perforated drum.

Minced fish

The highly nutritious end product consists of minced fish, unadulterated by waste products which can be used in a variety of ways. NMFS researchers have tested a "pepperoni" type of fish sausage made from the end product. They have also tried adding a moderate amount to meat compounds such as frankfurters and meat loaf.

Results of tests with shrimp indicate that a considerable quantity of shredded meat adhering to shells can be saved. As a consequence of the shrimp experiments, investigators suggested a new method of producing high-grade shrimp meal from shrimp wastes.

Further work is underway at NMFS laboratories to determine both the manufacturing and economic implications of such new uses of seafood as they relate to U.S. fisheries. *—NOAA*

Florida Cloud Seeding Effects More Rainfall

Dynamic cloud seeding can probably provide worthwhile drought mitigation in Florida, two government scientists have concluded following a series of cloud seeding experiments last spring. Those experiments increased rainfall by an estimated 100,000 acre-feet.

Dr. Joanne Simpson and Dr. William L. Woodley, of the Experimental Meteorology Laboratory of Commerce's National Oceanic and Atmospheric Administration in Miami, have presented their report on the NOAA-State of Florida seeding program to the Florida Governor's Environmental Coordination Council in Tallahassee.

Worst drought

The project was conducted by NOAA in cooperation with the Central and Southern Florida Flood Control District. Earlier in the year, Governor Reubin Askew had asked NOAA's help in attempting to relieve the worst drought in the state's history.

Cumulus clouds were seeded with silver iodide on 14 days between April 1 and May 31. The seeding was carried out by a DC-6 from NOAA's Research Flight Facility, accompanied on a few missions by the Research Flight Facility's B-57. *—NOAA*

Patents Of Special Interest

Recent patents issued by the U. S. Patent Office included:

X-ray image converter. A high performance folded objective lens and a compact fluoroscopic apparatus incorporating the lens are disclosed. The objective lens has a relative aperture of f/1.0 and its performance has been optimized for use with an X-ray image intensifier tube. The lens consists of two spaced groups with a fold of 90 degrees introduced between the two groups. The first group, which consists of four elements, is of relatively low power. The second group which consists of six elements is of relatively high power, designed particularly to have a short physical length. Provision has been made for makeup glass in the back focal region. The fluoroscopic apparatus, of which the lens is a part, achieves compactness measured along the axis of the X-ray beam by folding the optical axis. In a preferred application, this feature permits location of the fluoroscopic apparatus in the limited vertical dimensions available beneath an examination table without reduction in the efficiency of optical coupling to the conventional multiple output devices. Patent No. 3,622,786 issued to Bruce H. Walker, Liverpool, N.Y. and others and assigned to General Electric Company.

Patents numbering 2,695,998 to 2,698,433 expired during December, 1971. Upon the expiration of the 17-year period covered by a patent, the invention passes into the public domain and may be made, used or sold by the public without payment of any royalty, or infringement of the inventor's exclusive patent rights.

Dental prophylaxis apparatus. A dental prophylaxis device including a rotary, pliable tooth-engaging member of flexible material, onto the side wall of which is discharged, under the finger control of the dentist, a cleaning paste from the tip of a collapsible reservoir in the form of an expandable vial mounted on the nearby shank of the dental tool and having a contoured, flexible discharge tip which extrudes paste onto the tooth engaging member when the reservoir is squeezed. The pliable member is preferably formed with paste-impelling surfaces which move the paste toward the tooth, and the tip of the vial maintains its proximity to the side wall of the pliable member both to continue the flow of paste to the tooth surface, and to preclude accumulations which result in splattering. Patent No. 3,621,577 issued to Ronald P. Spinello, 372 Post Ave., Westbury, N.Y. 11590.

Compressing industrial refuse. An installation for processing waste material, such as household garbage and industrial refuse, including a hatch for receiving the waste material from a disposal chute the hatch divided by a pivotally mounted shutter into a space for accumulating the material from the disposal chute and a discharge chamber aligned above a receptacle into which the waste material is packed. Positioned for movement transversely across the hatch space toward the shutter is a hydraulic piston rod which compresses the accumulated material and pivotally displaces the shutter so that the compressed material is transferred into the hatch chamber and then drops into a receptacle. A collecting drum supports a number of receptacles and is arranged to replace filled receptacles with empty ones. A photoelectric cell senses the level of the accumulated material in the hatch space and through an electrical circuit and hydraulic circuit commences the operation of the hydraulic piston rod for compressing the material. Patent No. 3,613,559 issued to Marcel Buisson, 3, Place des Halles, Chartres, France.

Abstracts and drawings of patents are published as they are issued in the *Patent Official Gazette* each Tuesday. More than 1,600 patents are issued each week. Trademarks are published in the *Trademark Official Gazette.* Copies of the *Patent Official Gazette* and the *Trademark Official Gazette* may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402.

Science Calendar

Jan. 9-14—Boulder, Colo.—University of Colorado. Workshop on "The Management of Technology: Effective Management of Engineers and Scientists." Sponsored by the university's Center for Management and Technical Programs.

March 1-3—Washington, D.C.—Shoreham Hotel. 13th Scintillation and Semiconductor Counter Symposium. Sponsored by Nuclear Science Group of the Institute of Electrical and Electronics Engineers, Atomic Energy Commission, and the National Bureau of Standards.

March 1—Gaithersburg, Md.—National Bureau of Standards.
IEEE Computer Society.

March 22-24—Gaithersburg, Md.—National Bureau of Standards. Conference on Accuracy in Spectrophotometric, and Phosphorometric Measurement.

April 24-27—Washington, D.C.—American Physical Society, Sheraton-Park Hotel.

April 25-28—Orlando, Fla.—Sixth annual Inventors' Congress held concurrently with Florida Industries Exposition which sponsors it in cooperation with the Commerce Department.

December 27, 1971

International Commerce

- What the DISC means for U.S. firms
- Trade missions in E. Europe—two reports
- Prospects for sales to Israel
- Ireland's preparations for EEC entry
- Growing Singapore and its import needs

U.S. Sales Drive In Latin America Shifts To High Gear

Newsmemo

To the action areas for business in the developing nations, add telecommunications. Stepped-up financing to build phone systems and other information links in the world's developing lands is the aim of a new five-year program at the World Bank. Up to now the agency has been concentrating its loans on educational and agricultural projects. A World Bank study found one phone per each 100 persons in the developing nations, compared with 55 per 100 in North America. The Bank plans to hike its loans for telecommunications by 50 percent in the 1972 to 1976 period.

Commerce's blue ribbon group of U.S. traders, the National Export Expansion Council, will take over the center stage at Chicago's upcoming 35th Mid-America World Trade Conference. Spokesmen for the Council's Action Committees--with such interests as finance, taxation, developing countries, export promotion--will present their business viewpoints on these matters as a major convention feature.

The Chicago conference provides a capsule description of what is on the mind of the U.S. trader today. The outline for the March 1-2 meeting lists these overall topics: Nationalism and All Its Ramifications; Eastern Europe, Russia and China; Consumerism and Imports; The Multinational Company; U.S. Strategies with Japan, and Financing of International Operations.

Whose statistics? Sophisticated readers of trade reports know they must keep asking the question. A disparity of $1 billion turned up in 1970 trade totals supplied by the U.S. and Canada. Now there is a determination to iron out differences in reporting methods. The two nations agreed this month to further an exchange of import-export data on a highly detailed commodity-by-commodity level. They will also explore the feasibility of using each other's import data aggregates as a means of reducing the reporting burden on exporters in both countries.

Industry and Government in the U.S. must work together to improve international industrial standards. This concept underlies a recent award to a Commerce Department official by a standards group from private industry. The honor, by the American National Standards Institute (ANSI), went to Richard O. Simpson, Deputy Assistant Secretary for Product Standards. It was a salute to his work in emphasizing the urgency of united U.S. action now in the world standards field, before the doors are locked to U.S. exports ruled unacceptable for use overseas.

International Trade Winds

CONSTRUCTION — The Aetna-Standard Engineering Co., Ellwood City, Pa., will build a coil preparation line, a continuous electrolytic tin line, and a continuous annealing line for Brazilian National Steel Co., Volta Redonda, Brazil, at a cost of nearly $4.5 million. Startup is expected in late 1972 or early 1973.

ENGINEERING—Harza Engineering Co. International has been appointed by the Khuzestan Water and Power Authority of Iran to prepare plans and specifications for a 575-foot rockfill dam plus two irrigation and drainage projects totaling 133,000 acres. The Nader Shah Dam will be located on the Marun River, in southern Iran 80 miles east of Abadan.

CHEMICALS—The Houdry Division of Air Products and Chemicals, Inc., Allentown, Pa., and Haldor Topsoe of Vedbaek, Denmark, have announced formation of the Houdry-Topsoe Co., a joint venture to manufacture and market catalysts for the production of chemicals. Topsoe's existing production facilities at Bayport, Tex. will be expanded to accommodate manufacture of a full line of catalysts.

COMMUNICATIONS—GTE International Inc. has been awarded a $1 million contract to provide Nepal with its first nationwide communications system. The 380-mile microwave radio system will provide telephone service between Nepal's ten main cities. At present, high-frequency, single-sideband radios afford the only means of long-distance voice communications in the remote country. The microwave system will be installed and operated by the Nepal Telecommunications Board, with assistance from GTE. To transport equipment and personnel in some of the roadless areas, the Board will utilize both yaks, the area's ancient beast of burden, and helicopters. The famous Sherpa mountain climbers will be used as guides to reach remote sites.

ACOUSTICS—The Japanese Government has approved a licensing agreement between Industrial Acoustics Co., Inc., New York, manufacturer of noise-control equipment, and Sasakura Engineering Co., Osaka, producer of seawater distillation plants. The agreement grants Sasakura all rights to make and sell Industrial Acoustics noise-control products and systems for powerplant, marine and industrial applications in Japan, Korea and Taiwan, and to market Industrial Acoustics apparatus on a nonexclusive basis in other Far East nations.

DISC Tax Deferral Benefits For Exporters Are Outlined

The DISC proposal, providing tax deferral for income from export sales, became an integral part of the U.S. tax code, on Dec. 10, when President Nixon signed into law the Revenue Act of 1971 (Public Law 92-178). This capped Administration legislative efforts of almost two years to obtain better tax treatment for U.S. exporters.

The DISC was originally proposed to Congress in May, 1970, to remove an income tax disadvantage to U.S. export sales as contrasted with foreign manufacturing by subsidiaries of U.S. firms. Although approved by the House last year as part of the Trade Act of 1970 (H.R. 18970) DISC failed to receive Senate approval during the 91st Congress. On Aug. 15, 1971, the President asked for adoption of the DISC export incentive as part of his integrated New Economic Program.

Final Congressional action on these measures came Dec. 9, when both the House and Senate approved a compromise version of the Revenue Act of 1971, worked out by a joint House-Senate conference committee.

What is the DISC?

"DISC" stands for Domestic International Sales Corporation—a new category of corporate entity, for tax purposes, which has been added to the Internal Revenue Code by Public Law 92-178, effective Jan. 1, 1972.

In order to qualify as a DISC, a corporation would be required to confine its activities almost entirely to export selling and certain related activities. As long as the DISC remains qualified, one half of its export income would be deferred from taxation. However, this deferral only applies to that portion of its earnings which it retains and uses for export development purposes. Once a distribution to shareholders is made (and the law requires 50 percent of export income be deemed distributed) it will be taxed to the shareholders at their normal rates. Therefore, the overall tax effect of the DISC is deferral of tax on 50 percent of export income, rather than exemption.

Company example

Here is a simple example of how the DISC principle will operate:

A company presently exporting establishes a DISC subsidiary, according to the laws of incorporation of one of the 50 States or the District of Columbia, to handle its export sales and certain other related activities. The new DISC must be capitalized at a minimum level of $2,500. Only one class of stock is permitted, and all shareholders of the DISC must approve its election for tax deferral status.

The minimum required capitalization is less than that usually required for incorporation, and has been permitted to facilitate the establishing of DISCs by small and medium size firms. The two latter requirements with regard to one class of stock and shareholder approval, are made because of the tax liabilities which arise to the shareholders when certain income is deemed distributed by the Internal Revenue Service, when, in fact, it may remain with the DISC.

PHOTO ON PAGE 31—As Commerce Department trade specialists focus U.S. business attention on opportunities for sales in Latin America, they are stimulated and encouraged by the results of a recent Commerce-produced trade exhibition in Sao Paulo, Brazil. A story about that show and about other trade promotion plans for the Latin American market is on Page 40. Photo shows Antonio Rodrigues Filho, Vice Governor of the State of Sao Paulo, in the Fisco Corp. all-terrain car designed to aid the work of construction engineers.

Once the DISC is established, it will purchase goods from its parent, or from any domestic producer, to sell for ultimate use outside the United States. The DISC will most likely maintain sales and service facilities abroad to enhance its market penetration efforts or preserve its competitive position. It is also envisioned that a DISC will normally make a part of its retained earnings available to the parent, or other domestic manufacturers of export goods, in the form of "producer loans," for use in modernizing or expanding export production facilities.

To prevent the use of DISC profits for foreign investment, the legislation provides generally for the termination of tax deferral on DISC profits which are the subject of a producer's loan, if the profits are considered to be invested in foreign plant or equipment.

The amount considered invested in this manner is the net increase in foreign assets of members of the same controlled group as the DISC, acquired in taxable years beginning after Dec. 31, 1971.

The following amounts may be used to offset increases in foreign assets for purposes of determining a controlled group's net increase in foreign assets: 1) one half the earnings of the foreign affiliates of the DISC and one half the fees and royalties paid to the DISC's corporate group; 2) the amount of debt or equity capital raised abroad by the group; 3) additions to foreign depreciation reserves; 4) the amount of stock or debt obligations of domestic members of the group, issued to unaffiliated foreign persons after Jan. 1, 1968, to the extent they constitute a long-term foreign borrowing under the foreign direct investment program, less any actual foreign investment by domestic members of the group during the period that the obligations are outstanding; and 5) the amount of liquid assets held abroad on Oct. 31, 1971 in excess of reasonable working capital needs.

Several small companies might jointly own a DISC to sell their complementary products in a full product line. Moreover, the DISC form of organization is adaptable to use by a combination export manager (CEM), in view of the similarity of functions between a CEM and a DISC. Special provision is also made for a U.S. controlled foreign corporation which qualified as an export trade corporation under section 970 of the Code for any three years beginning before Nov. 1, 1971, to transfer its assets to a DISC without tax consequences.

Certain types of corporations are ineligible to form DISC's because the combination of DISC deferral and special tax treatment normally accorded these corporations would be inappropriate. These are tax exempt organizations, personal holding companies, banks, savings and loans and other similar financial institutions, insurance companies, mutual funds, China Trade Act Corporations and subchapter S corporations. In addition, a Western Hemisphere Trade Corporation cannot hold stock in a DISC.

How would it qualify?

Basically, a corporation which elects to be a DISC will have to meet two major requirements, with regard to both income and assets, to qualify for and maintain its tax deferral status. At least 95 percent of its income must be from qualified export receipts, as defined in the legislation, and 95 percent of its assets must be export related. These tests were designed to ensure that income enjoying this special tax treatment is used expressly for export development purposes.

A corporation, to qualify for the DISC benefit, must:

—be a domestic corporation
—have at least 95 percent of its receipts from qualified export sales.
—have at least 95 percent of its assets in qualified form, i.e., used in export
—have but one stock class
—have minimum capitalization of $2,500
—make an election to be treated as a DISC.

Qualified export receipts generally include income from the sale, lease, or rental of goods produced, grown, or extracted in the United States for ultimate use abroad. It also includes income from services related and subsidiary to such sale, lease or rental. Manufactured goods made with foreign components can only qualify if the value added in the United States equals or exceeds 50 percent of the fair market value of the product.

Other qualified receipts, as stipulated in the Act, are gains from the sale of plant and equipment used in the corporation's export business; dividends from a foreign selling subsidiary of the DISC; interest on such obligations as accounts receivable arising in connection with qualified export sale, lease, or rental transactions, producer's loans and obligations issued, guaranteed, or insured by the Export-Import Bank; receipts from engineering and architectural services on foreign construction projects; and receipts for management services given other DISCs.

Qualified export assets are defined rather broadly to include export goods held as inventory; assets used primarily in connection with the sale, lease, rental, storage, handling, transportation, packaging, assembly or servicing of export goods or the performance of managerial, engineering or architectural services producing qualified export receipts; accounts receivable held by the corporation arising from qualified export activities; money and bank deposits needed to meet working capital requirements; certain loans made by the DISC to its parent or an unrelated export manufacturer; stock or securities of a related foreign export corporation.

Also qualifying as export assets are certain Export-Import Bank and FCIA obligations; obligations of a domestic corporation organized solely to finance sales of export property under an agreement with Eximbank, where the loans are guaranteed by the Bank; and bank deposits which, at the end of the taxable year, exceed reasonable working capital needs but are invested in qualified export assets within a specified period of time after the end of the taxable year.

Specifically excluded from the definition of qualified export assets is property leased or rented by a DISC for use by any member of a controlled group which includes the DISC. Also excluded are patents, inventions, models, designs, formulas or processes, copyrights (other than films, tapes, records, or similar reproductions for commercial or home use) goodwill, trademarks, trade brands, franchises or other similar property.

An escape valve has been provided in the legislation to prevent the inadvertent disqualification of a DISC which has not met the 95 percent export income and assets tests. By making a pro rata deficiency distribution to shareholders within 8½ months of the close of the taxable year to bring its income and assets into line, a DISC which has maintained at least a 70 percent level in each category will be considered to have satisfied the gross receipts and assets tests.

Provision is also made for deficiency distributions after the 8½ month deadline, where it is evident that there is reasonable cause for failure to make the required distributions—as in the case of blocked foreign currency or expropriation. In this event, however, the corporation must pay a charge to the Internal Revenue Service, within 30

CEM LEADERS IN WASHINGTON—*Six executives in the Combination Export Manager field met with Commerce Department export promotion officials recently. They are (from right, standing) Walter Pfeiffer, William W. Prout, Stanley W. Epstein, Charles H. Nevil, Leonard S. Miller and H. W. Browne. Standing at left is Commerce official Arthur Pothuisje. Other Commerce officials are (seated, from right) Dallas M. Coors, Paul E. Pauly, Edward S. Simmons and Thomas De Seve.*

days of the date of distribution, of 4½ percent of the amount distributed times the number of taxable years the distribution was delayed.

In order to avoid the complexities which often attend the application of pricing rules governing transactions between a U.S. parent and a foreign subsidiary under section 482 of the Internal Revenue Code, and to encourage the use of the DISC incentive, two additional alternative methods of price determination are provided to permit a more liberal attribution of income to the DISC than the normal allocation on an arm's length basis.

The first rule would allow the DISC to earn up to 4 percent of the qualified export receipts arising from a DISC sale, plus 10 percent of the DISC's export promotion expenditures attributable to the sale. The second rule would allocate to the DISC up to 50 percent of the combined taxable income of the DISC and the parent derived from the related export sales, plus 10 percent of the promotional expenses attributable to such sales.

Under this second method, special rules will be issued to permit marginal costing where a DISC is attempting to establish or maintain a market for exports from the U.S.

Enactment of the DISC represents recognition by the Government that exporting is of particular importance to the economic well-being of the nation, and that greater effort is needed on the part of both business and Government to guarantee the international competitiveness of U.S. exports. Of course, each firm will have to determine, in conjunction with competent tax counsel, whether the DISC form of export sales organization will be desirable and profitable, depending on the economic circumstances prevailing in each case.

IRS Issues DISC Rules

A corporation must elect to be treated as a DISC for a taxable year during the 90-day period immediately preceding the beginning of that taxable year, it is stipulated.

Revenue Procedure 72-12, released Dec. 17 by the Internal Revenue Service, allows an existing corporation whose tax year begins in January, February or March 1972 until March 31, 1972 to file its election. New corporations whose first taxable year begins in 1972 may file within 90 days after incorporation.

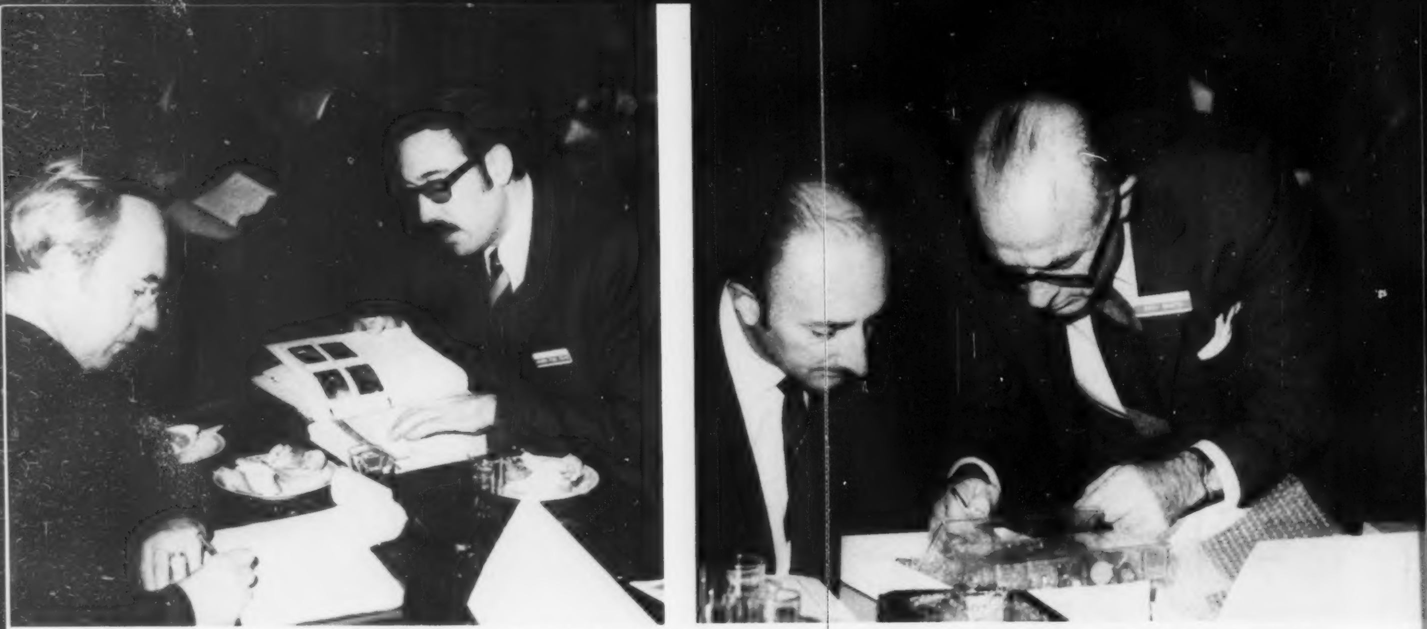
CEM Executives Plan U.S. Body

Formation of a single national group to represent the Combination Export Managers (CEMs) of the United States is the aim of a meeting in Chicago on Jan. 8.

Officials of Commerce's Bureau of International Commerce (BIC) met in Washington Dec. 7 with executives of five of the existing CEM associations to aid these plans.

In addition, the Bureau of International Commerce has agreed to prepare informational materials on advantages of CEM services to small and medium sized U.S. firms.

The CEM leaders participating in the Washington sessions were H. W. Browne, National Association of Export Management Companies, Inc.; Leonard S. Miller, President, Export Managers Assn.; Charles H. Nevil, President, Meridian Enterprises, Inc.; Stanley W. Epstein, President, Anglo-American Aviation Co.; William W. Prout, Charles McKay and Associates, Inc., and Walter Pfeiffer, President, Overseas Sales and Marketing Assn. of America, Inc.



SELLING IN PRAGUE—*Mission members in individual discussions described advantages of their instruments to trade officials and end users. In first picture, Roger P. Main at right; in second, Eddy Courts at right.*

U.S. Instrumentation Mission Sees Sales Prospects In Eastern Europe

"You need sharp marketing tools, and you never let up once you put them to work. In so doing, you will easily find the necessary introductions to your buying counterparts. You will also find that your foreign competitors are way ahead."

So concluded a member of a Commerce Department trade mission, speaking of marketing U.S. instruments to the East-Central European area. The six-member group, just back from Czechoslovakia, Hungary, and Poland, represented firms that for the most part had not previously operated in these countries.

Although some Western European instrument competitors have made inroads in the area, all of the mission members believe that their own companies' technology and the quality of their products will enable the U.S. firms to carve a piece of the market, reports Mission Director Lewis E. Conman.

The specialized group offered to the East European trading companies and end-users scientific and laboratory instruments and components of quality, efficiency, and modern technology. As a result of their reception by potential customers, says Director Conman, who also heads the Department's Pittsburgh Field Office, mission members are eager to make regularly scheduled calls, to exhibit their products, and provide pertinent literature. They estimate sales in the next two years at about $900,000.

Products unfamiliar

Roger P. Main, representing SPEX Industries, Inc., of Metuchen, N.J., reported at the wrap-up session, "There is only slight and or superficial acquaintance with much of the American-made scientific equipment available. The level of awareness is much lower than in Western Europe where such American-made items have found a large market. As Western Europe buys much of its scientific equipment from the United States, Eastern Europe should do the same—under the same conditions. We plan to return and to continue our promotional efforts in these countries. We believe these efforts will be successful. We have found that scientists here are unaware of all U.S.-made instruments in our field, both ours and those of our American competitors."

The phenomenon that could open new sales wedges is the gradual acceptance by these countries of the marketing concept along with their production role, according to Conman. He observed that a number of managers—both government officials as well as line producers—subscribe to the tenet that managing is a basic component of the growing total marketing strategy. Such expressions as competitive product strategy, marketing research, technological forecasting, and methodology have become a part of the business vocabulary.

Mission Director Conman feels certain that continued efforts by these countries to expand marketing-management efforts will aid the cause of American exports into their markets. After a morning session with 20 officials in Warsaw, Conman expressed surprise at both the marketing concept and understanding of marketing problems of the Polish attendees—not only of their own, but of universal and American tools and methods. These developments, however, are only warmer trade winds for U.S. businessmen, he says—continual hard selling remains.

Eddy Courts, President of Teknis, Inc., Plainville, Mass., representing semiconductors, fiberoptics and nuclear measurement systems, states his firm's position: "The mission reveals the existence of hungry markets in all three countries —customers are familiar with U.S. products, are aware of the quality, and would like to buy. In many cases their attempts to buy from the United States have been frustrated by what these customers believe to be 'the U.S. Government restrictions on trade'."

Problems discussed

Pockets of problems do exist and sometimes annoy both prospective purchaser and seller, the mission reports. Most-favored-nation tariffs, export controls on some products, financing difficulties—all were thrust into dialog by country officials.

Ernest Nathan, president of Elmwood Sensors, Inc., of Providence, R.I., manufacturers of thermostats and contactors, voiced an opinion that "duties, licenses, and credits were problems raised by (officials of) all countries. MFN was discussed in Prague and Budapest in almost all meetings. Availability of hard currency will be a problem, particularly for larger purchases. This is less the case in Poland where the balance of trade is in its favor. They all want to do business with us, but we must actively pursue these markets and must, on a government and banking base, make it easier to do business. They (prospects) cannot wait for weeks and months until shipping permits are given. We hope that MFN status will be given to Hungary and Czechoslovakia."

All three countries appear to sustain an excellent credit record. The consensus among mission members is that the U.S. exporter should concentrate on sales, respect the sales rules and contracts and not permit the financing problem to become insoluble. No order, it was agreed, can be placed by the purchasers unless the money has been set aside by the central banks or the purchase approved by those officials controlling the budget.

William A. McCarthy, vice president for marketing, Victoreen Instrument Division, Cleveland, Ohio, says he believes that changes in both U.S. Government policy and in public opinion, plus follow-up activities he is planning as a result of mission participation, will enable him to accomplish his goals.

A. H. Reinfeld, president, REA International Corp. of Rahway, N.J., explains that "at REA we are fully prepared to provide complete marketing service, which runs the gamut from the issuance of credits to a technical back-up and support for every item. We have taken steps to organize a new internal department which will market goods acquired and purchased from our Eastern European counterparts."

Joseph A. Baicker, Princeton Gamma-Tech, Inc., Princeton, N.J., points to such handicaps as the proximity of competitors and the limiting effect of some U.S. trade regulations: "Clearly, we can't simply be better than our Western European competitors. We have to be dramatically better."

Central Ohio Mission Visits Romania, USSR, Yugoslavia, Hungary

That Eastern Europe has been a market of considerable potential largely neglected by U.S. firms until recently is also the conclusion of a regional trade mission that visited Romania, Yugoslavia, the USSR, and Hungary in the fall.

The countries display varying degrees of similarity, but the differences between them are significant, Walter W. Birge, Director of the Central Ohio Mission, reports; and the participants, representing suppliers of machines for mining, road building, earth moving, baking, and glass polishing, factory and post-office conveyors, and electric power control equipment, did not necessarily find the same markets offering the strongest immediate and long-term potential.

SEEKING NEW MARKETS—*Columbus area mission takes off for Eastern Europe to acquaint buyers with a variety of equipment made in Central Ohio.*

The "heavy equipment" men on the mission felt that for the near future Yugoslavia should be the most interesting—because of mining and road-building projects now or soon-to-be under way, and construction activity by Yugoslav firms in several overseas areas. Some members saw the best possibilities there in food specialties, furniture, and tourism equipment.

In Romania, two members were requested to submit bids on sizable projects—one having to do with bakery equipment, the other postal conveyors involving almost $1 million. All members agreed that selling efforts in Romania must be intense and over a considerable period of time.

Companies wishing to sell in the Soviet market should follow up initial contacts preferably with

Russian-speaking salesmen who are technically qualified, Birge pointed out. "U.S. firms which send men to the USSR who are not prepared to talk about all technical aspects of their products are not going to get far," he said.

In general, the group was disappointed in business prospects in Hungary. U.S. goods must be shipped to Hungary, Birge pointed out, through the port of a third country—resulting in higher transportation costs. Tourism-related equipment, high-technology products, and woodworking machines are among the most likely prospects mentioned by the mission members.

The seven-member mission was sponsored by the International Trade Committee of the Columbus Area Chamber of Commerce. Leader Birge is manager of the International Division of the Ohio National Bank of Columbus.

Optical Equipment Mission To Visit Italy

A trade mission comprised of manufacturers of optical processing machinery, equipment, and supplies is being organized by the Commerce Department to visit Italy next April. The agenda for some members may include individual business appointments in Vienna and or Swiss cities.

Market research, a preliminary survey of U.S. companies, and a direct suggestion by the Italian Optical Association to send such a mission, indicate a good potential despite price competition of suppliers from third countries.

Members of the mission—limited to eight businessmen—will be doing business for their own firms. Although participants pay their own travel expenses, all organizational and operational costs will be paid by the Department. Commerce also will carry out advance work overseas through a seasoned trade specialist and provide a senior official to serve as mission director. Before the group's arrival, a program for its activities will be established, including arrangements for the members to meet individually with the principal users of their products.

U.S. companies interested are invited to write to the Trade Missions Division, BIC-940, U.S. Department of Commerce, Washington D.C. 20230; or phone Paul Mayer collect at 202-967-2232.

'Invest In U.S.A.' Program Will Have New Thrust

New initiatives to attract more foreign capital investment to the United States have emerged from a conference of Washington and overseas U.S. Government officials held recently in Paris.

Thirty U.S. Commercial Officers from Embassies and Consulates in the Western European area met with senior Commerce Department officers to design the initiatives.

They were spurred by one of the recommendations of the Williams Presidential Commission on International Trade and Investment Policy that called for a stronger Commerce Department effort to add more foreign investors through its "Invest in the U.S.A." program.

The conferees focused on building greater foreign awareness of U.S. investment opportunities and benefits, promoting a larger volume of specific investment proposals from foreign businessmen, improving the services provided to prospective investors, and encouraging greater investment-stimulating activities by State development authorities.

As outlined by S. Stanley Katz, Director of the Commerce Department's Office of International Investment which is responsible for the "Invest in the U.S.A." program, the new initiatives include:

► Substantially increased operational scope for the roving Industrial Development Attache, Johnson Garrett, who is overseas coordinator of the program;

► Appointment of Charles A. Fagan III, presently Deputy Assistant Secretary of the Economic Development Administration, as a second such Attache, to be stationed in Brussels;

► A series of "Invest in the U.S.A." conferences in Europe following the pattern of Paris and Munich conferences held in 1971;

► Corresponding conferences in the United States to be attended by a select group of foreign businessmen who will visit potential plant location sites as guests of State development authorities;

► Broadened publications, with materials in several languages;

► And a substantial step-up in assistance to State efforts to attract foreign investors.

In addition, it is planned that foreign firms seriously considering investing in the United States would be provided with specially-tailored information developed by State authorities covering questions such as local production costs, distribution and marketing facilities, and State and local taxation.

U.S. Ambassador to France Arthur K. Watson, opening the Nov. 22 conference, underscored the importance of U.S. efforts to attract new foreign investment, not only to help the U.S. balance of payments position, but to give substance to U.S. liberal policies in the investment field.

In fact, foreign direct investments in the United States have shown substantial increases in the past several years, reaching (on a net capital inflow basis) nearly $1 billion in 1970. The book value of foreign direct investments amounted to $13.2 billion that year.

Foreign direct investments to be particularly encouraged are those in product lines with import-saving prospects, in facilities incorporating new processes or technology, and in economically-distressed areas of the United States.

Trade Fairs, Centers

U.S. Exhibitors Wanted For Three Overseas Shows

Electronic components, France: American manufacturers of electronic components and instrumentation will have a unique opportunity to sell their products to the dynamic French electronics market at the Department of Commerce exhibition at the Salon International des Composants Electroniques, April 7-13, in Paris.

The Paris electronic components fair is the oldest and most important components exhibition in Europe. More than 1,100 manufacturers from 20 countries displayed and sold equipment at this event in 1971. Dating back almost 40 years, COMPOSANTS has a reputation as a showcase for state-of-the-art developments in electronics, and approximately 65,000 French trade visitors regularly attend. Nearly every electronic professional in France plans to be in Paris during the week of COMPOSANTS; another 7,000 foreign trade visitors came to the 1971 show.

For reservations or further information contact Bill Warnes at 202-967-4456 or write him at BIC-946, U.S. Department of Commerce, Washington, D.C. 20230.

Mini-Midi Computers & Software, Australia: U.S. producers will be provided with ready-made entry to the Australian market for this type of equipment at an April 17-21 show at the Sydney Trade Center.

Computing equipment is a major growth area in Australia, nearly all computers are imported, and U.S. manufacturers are recognized as established leaders in the production of computers.

Australian imports of EDP equipment doubled in fiscal 1970, up to about $72 million.

A growth rate of approximately 20 percent per year for the Australian EDP market, supplied almost entirely by imports, is projected for 1972-74.

American manufacturers operating in the United States and the United Kingdom have installed about three-fourths of the more than 1,000 digital computers now in Australia. Exports from the United States currently supply about one-half of Australia's EDP needs and amounted to about $35 million in fiscal 1970.

The trend toward small computers can be largely attributed to the nature of the Australian economy, which is comprised mainly of small to medium sized businesses for which larger computers or time sharing operations are apparently not often practical.

Indicative of the demand for small computers, over 60 percent of the 1,000 digital computers in operation in mid-1970, and over 60 percent of the digital computers on order at that time, were valued at $250,000 or under.

At the lower end of the price range there is presently a definite and growing demand for desk-top computers and calculators.

Contact John J. Klinglehut at 202-967-4564, or write him at BIC-950, U.S. Department of Commerce, Washington, D.C. 20230.

Pollution control equipment: Germany. This is the largest market in Europe for industrial air treatment and emission control equipment. Estimated pollution control investments for municipal sewage treatment alone in West Germany have amounted to almost $40 million annually during the past five years. American manufacturers of pollution-fighting equipment will have a showcase for their products when the U.S. Trade Center at Frankfurt holds a pollution control exhibition from March 20-24.

It is estimated that Germany will spend some $8.2 billion on environmental control between 1971 and 1975. During this period annual expenditures are expected to be approximately $1.2 billion in 1971, increasing to $1.3 in 1972, $1.6 in 1973, $1.9 in 1974, and $2.2 billion in 1975. About half of the total amount will be spent by industry and half by government entities. The heaviest spending in the industrial sector will be in the chemical industry which is expected to invest some $2.6 billion in environmental control. In the major fields of pollution abatement, the greater part of the funds will be allocated as follows: air pollution—$0.8 billion; sewage and waste-water treatment—$4.7 billion; waste disposal—$700 million, and noise abatement—$600 million.

For more specific details on the types of equipment needed, call Lee Swift at 202-967-4461, or write him at BIC-942, U.S. Department of Commerce, Washington, D.C. 20230.

Africa-Based U.S. Firms Invited To Kenya Exhibition

The first **All Africa Trade Fair** will be held from Feb. 23-March 5 in Nairobi, Kenya's Jamhuri Park. As its main purpose is to promote intra-African trade, fair organizers are particularly anxious to attract product exhibits of U.S. companies operating in Africa. As the Fair is expected to attract a large number of visitors, representation by U.S. affiliates in Africa could result in orders, goodwill, and greater African awareness of U.S. products. Write: "The Organizer," All Africa Trade Fair, P.O. Box 30302, Nairobi, Kenya; cable address FAIRAFRIC. State the type of product made, the African country of manufacture, and approximate proportion of value added in these countries.

HARRIS INTERTYPE CORP.

ON-THE-SPOT OBSERVATION—*Harris Intertype officials greet Robert Beshar (second from right), Deputy Assistant Secretary of Commerce and Director of the Bureau of International Commerce, during tour through the exhibit area of Sao Paulo.*

Latin Sales Drive Now In High Gear; Sao Paulo Show Has $30 Million Total

The Department of Commerce is mounting an intensive drive to increase sales of U.S. products in Latin America. The effort, which will be capped by the opening of two U.S. trade centers in coming months, was stimulated by the results of a major trade exhibition just concluded in Brazil.

This show, which put selected industrial equipment before 11,693 trade visitors at the site in Sao Paulo, produced $6.6 million in sales off the floor and $24 million in additional sales over the next year.

The Sao Paulo show, first to be staged under U.S. Government auspices in Brazil since 1968, also led to the appointment of 34 agents and distributors by exhibiting firms, with 75 more candidates still being interviewed.

Ninety-six exhibitors represented 128 U.S. manufacturers in the fields of business equipment, printing, machine tools and construction at the Sao Paulo exhibit. A total attendance of approximately 35,000 produced 2,175 sales leads for business equipment; 3,578 for printing machinery; 2,483 for machine tools, and 692 for construction items.

Trade centers ready

The new trade centers are to be opened in Mexico City and Buenos Aires. The Center in the Mexican capital will be inaugurated with an exhibition of packaging machinery on Feb. 14. In the Argentine metropolis the U.S. facility, called a Regional Trade Development Center because it is aimed at buyers in a four-country area, will open with a quality control and reliability equipment exhibition on May 15. (See *Commerce Today*, Nov. 15, Page 36, for details on the Buenos Aires center.)

The Mexico City packaging exhibition is now complete, with 40 firms participating. They will show equipment for printing and labeling; forming, filling and sealing; bagmaking; bottle filling and capping; shrinks and rigid wrapping; aerosols; and weighing, metering and dispensing. The second exhibition at Mexico City will display automatic metal-working equipment and controls, from March 6 to 10. The third show will embrace industrial processing and analytical instruments, from April 24 to 28.

Meanwhile, a number of Commerce-organized trade missions are heading south of the border, exploring prospects for: mining equipment and fish-and-food processing equipment at two Peruvian trade fairs in April (Tecnomin and Technopan); and a general mission to sound out general business propects in Brazil and Venezuela next March.

Within the past year Commerce has sponsored trade missions to discover sales prospects for food processing equipment in Colombia, Panama and Costa Rica; metalworking machinery in Mexico and Venezuela; agribusiness in Colombia, Costa Rica, Mexico and Panama; tourism in the Caribbean; refrigeration equipment in Argentina and Brazil; finishing tools in Colombia, Panama and Venezuela; tourism in Mexico, and electronic data processing equipment in Argentina and Brazil.

The Sao Paulo show will be followed by several Commerce-sponsored trade events scheduled for Latin America in the next year: a solo exhibition of office systems in Caracas, Venezuela, next November or December 1972 (tentative); a display of medical equipment in the Buenos Aires Trade Center next November (tentative); a regional technical seminar on food processing and general packaging equipment next June in Guatemala City and San Jose, Costa Rica; participation in the El Salvador International Exhibition in San Salvador next Nov. 3-20.

WARM BUSINESS CLIMATE—*U.S. exhibitors at the Stockholm Trade Center are finding that cool Scandinavia has an hospitable business climate. Three recent shows may produce as much as $16 million in U.S. sales. Above, representative of Zero-Max Co. of Minneapolis demonstrates a variable speed drive to a potential buyer.*

Three Stockholm Shows Add Up $16 Million Total

U.S. firms expect to make more than $16 million in sales to Scandinavia during the next year as a result of three recent exhibits at the U.S. Trade Center in Stockholm.

The showing of advanced educational and industrial training equipment attracted 1,476 registered visitors who will prospectively buy more than $6.5 million in U.S. products during the coming year.

Many found agents

Fourteen of the 32 exhibitors at the Sept. 20-25 event were also looking for agents or distributors in the Scandinavian market. A total of 24 representatives were signed during the show and negotiations were under way with 35 more as the exhibition closed. Eight of the participants were new to the Scandinavian market and six others had never exported anywhere.

The president of Infonics, Inc. of Santa Monica, Calif., a seasoned export firm which was new to the Scandinavian market, pronounced the exhibit "the most successful in our company's history."

This was echoed by a marketing engineer from Fabri-Tek Education Systems of Los Angeles: "We reached the people we wanted to without having to go out on our own and beat the bushes. This was one of the most pleasing experiences I have encountered in my many shows."

An Oct. 12-16 exhibition of components for the design and manufacture of machinery and vehicles drew 39 exhibitors, and they expect to make more than $4.3 million in sales during the coming year as a result.

Twelve firms were seeking representation in the various Scandinavian countries, and 12 agents or distributors were signed. Negotiations were under way with another 45 as the exhibit closed.

The president of Truly Tubular Fitting Corp., a new-to-the-market exhibitor from Mt. Vernon, N.Y., said that "this show served to introduce our company to the specifics of export marketing and sales. It has been most instructive."

The export manager of E. Edelman & Co. of Chicago, a veteran Nordic trader which nevertheless appointed five additional distributors during the course of the exhibit, said "we strongly recommend these exhibitions at U.S. Trade Centers."

Details on an exhibition of Instruments for Chemical and Physical Measurement and Research, held Nov. 22-27, are contained in the article on Sweden on pages 8-11 of this issue. This show produced immediate and projected sales of $5.5 million.

Frankfurt Auto Show Sets Trade Center Record

With over $21.2 million in first year sales, a new record was set for the U.S. Trade Center in Frankfurt's exhibit staged at the "Automechanika '71 Fair, Sept. 18-26.

Twenty-one U.S. firms representing 56 manufacturers of automobile parts and accessories as well as service station and garage equipment displayed their product lines, the first of its kind organized on an international basis.

Forty-six of the companies present were interested in agency agreements and/or licensing or joint ventures. By the end of the show, fifty-four appointments were finalized and 197 prospects under consideration. Over 75,000 visitors were attracted to Automechanika '71. Almost 1,000 prospects registered at the U.S. exhibit.

The star of the USTC exhibit was Abacus International, which expects $9.2 million in sales of licenses and equipment during the next twelve months through contacts made at the fair.

Water And Labor Shortages, Tourism Will Boost Israeli Import Market

Israel's economy continues to grow at a rapid rate, but inflationary pressures are strong and the balance of payments is in deficit. The 20 percent devaluation last August of the Israeli pound has had a tempering effect on the trade gap, as has the 20 percent surcharge on all imports.

However, reports John P. (Basil) Wentworth, Commercial Attache at the U.S. Embassy in Tel Aviv, continuing defense expenditures and general insistence on a rising standard of living make it unlikely that the trade account will be in balance for the forseeable future.

Strong demand is expected for metalworking machinery, packaging machinery, and chemical processing equipment.

Israel continues to welcome foreign investment, and maintains investment officers in the United States to provide advice and encouragement to potential investors. Inquiries can be made to the Government of Israel Investment & Export Authority, 850 Third Ave., Suite 604, New York, N.Y. 10022 (phone 212-PL 2-5600, x268).

Blessed with a Mediterranean coast, a delightful climate, and unique historical attractions, Israel recognizes tourism as one of its most promising earners of foreign exchange. It is expected that tourists for 1971 will exceed 600,000, while a million annual visitors are projected by 1975.

Inadequate accommodations

Accommodations are inadequate for handling comfortably even the present figure—thousands of would-be tourists reportedly canceled visits to Israel this year because rooms were not available, and unnumbered others had to accept amenities that fell short of expectations. An ambitious program of building hotels and other tourist facilities is planned to correct this shortcoming.

Americans have consistently enjoyed a preference in the supply of hotel equipment and furnishings, as America is by far the most important source of visitors to Israel. The labor shortage will strongly influence the type of facilities that will be installed; buildings will tend to emphasize designs and techniques that will shorten the time of construction, while the emphasis in furnishings and equipment will be on increasing customer convenience without more labor input.

ISRAELIS TRY LATEST TECHNIQUES—*Materials for this cold storage building currently under construction at Lod Airport were fabricated in Columbus, Neb. Precast concrete and prefabricated building methods are just being introduced in Israel.*

Israel's present production in electronics is some $120 million, of which $21 million is exported. Plans are to double the export figure by 1975.

To achieve this goal, Israel counts on a highly trainable, quality-conscious work force, headed by an adequate number of well-educated, imaginative, and resourceful engineers. Weaknesses which must be overcome either by the slow process of training or, more hopefully, by licensing foreign know-how, are in modern management techniques, marketing, and production engineering. Again because of the tightness of the labor market, emphasis in plant and equipment will be on making the most efficient use of available workers.

The United States Solo Exhibition scheduled for March 6-10 in Tel Aviv will offer potential American exporters an opportunity to introduce electronics production equipment and computer peripherals to the Israeli market.

Israel is suffering from an acute shortage of housing, both commercial and residential. The shortage results primarily from the inflow of immigrants, the business boom, and the high rate of family formation.

The Ministry of Housing projects the construction of 100,000 dwelling units within the next five years.

While the demand for housing grows steadily, the construction industry continues to rely on old-fashioned techniques. Concrete block and reinforced poured concrete continue to account for the overwhelming majority of construction units, with precast concrete and prefabricated techniques just beginning to enter the market.

The Minister of Housing recently commented that Israel's slowness in building construction was costing the country some $3.7 million per month, pointing out that a reduction of one month per unit in building time would add 1,000 dwelling units a year to Israel's capacity. The Embassy has received numerous inquiries from Israelis interested in licensing know-how for modern building techniques, including such refinements as the premolded one-piece bathroom.

It has been seriously suggested that 200 Swedish builders be brought to Israel next year to alleviate the shortage of building technicians; this proposal underlines the fact that labor is in critical short supply. The shortage extends into other fields, as well, but is most apparent in the overstrained construction industry. Labor is imported from Gaza and the West Bank, but there is fear that any further increase in the supply of labor from those occupied territories may seriously upset their own economies.

A partial solution to the labor shortage can be the introduction of laborsaving machinery and techniques. Another approach would be provision of up-to-date production planning techniques, to insure efficient usage of available resources. Both of these solutions offer opportunities for American sales.

A rather off-beat application of laborsaving techniques is seen in the recent purchase of a numerically controlled metalworking machine by the owner of a machine shop doing job-shop business. Even for casual jobs, the owner found it economical to invest in a large and expensive machine in order to economize on labor costs and to avoid a large expenditure for jigs and fixtures that might never be used more than once.

This case is not at all unusual for Israel—the Israeli engineer typically has the ability to find or to accept uncommon solutions to common problems.

One of the first limitations on Israel's development may be the availability of fresh water. Present consumption of water is about 1.5 billion cubic meters annually, while the 1980 figure is projected at 1.8 billion. The predicted supply by 1980 is only 1.55 billion cubic meters, unless new sources are found or expensive desalination facilities are established. Nearly 80 percent of the country's water consumption is for agriculture; this percentage will decrease somewhat by the end of the decade, since industrial demand for water is increasing much faster than that of agriculture.

Formidable cost

In addition to being scarce, water is expensive. The water for the North of Israel comes largely from the Sea of Galilee, some 686 feet below sea level; the pumping cost alone to raise the water up to the consuming areas is formidable.

The supply of usable water could be increased—doubled, according to some sources—by proper pollution control and by reclaiming used water. The World Bank has been asked to make a loan of $25 million for treatment and disposal of sewage as part of the campaign to ease the water supply situation. It is expected that control of water pollution will be given increasing attention when this project gets under way.

The other side of water conservation is, of course, more efficient use of the available supply. Of the more than one billion cubic meters used for agriculture, for instance, much is consumed in spray irrigation, with attendant losses in evaporation and runoff. Any equipment that promises to use water more efficiently should have good sales prospects.

It is the official policy of the Government of Israel to discourage vendor financing; only on very rare occasions are terms more liberal than cash-against-documents permitted. However, financing by the U.S. Export-Import Bank is available in appropriate cases. Two Israeli banks cooperate with the Ex-Im Bank in relending credit programs and in cooperative financing facilities, and both types of program have been extensively used.

Ireland, Emerging From Slowdown, Prepares For Common Market Entry

While the economy emerges slowly from its slump of 1970, Ireland is preparing for the sharper competition that would result from entry into the European Economic Community. The Government is attempting to cope with inflation by improving its price control structure and to stimulate the economy by increasing capital spending, removing credit restrictions, and reducing corporate taxation.

The economic recovery has been unsteady and patchy. While real gross national product growth has doubled, to an estimated 3 percent, it is below the average 4.2 percent of the previous decade.

Domestic investment remains sluggish and demand stagnant. The most encouraging improvement is the stabilization of the labor situation under the labor-management agreement achieved last year, but unit wage costs continue to rise faster than those of most OECD countries, feeding an 8 percent inflation.

Unemployment has again risen to nearly 7 percent, largely as a result of the difficulties Irish firms are having in adjustment to free trade with the United Kingdom, new technology and the decline in demand both at home and abroad.

Irish exports are only two-thirds of total imports, and the leading invisible earner, tourism, is declining, although the rate of growth in exports is improving.

The U.S. Embassy in Dublin goes on to say that U.S. investors continue to find Ireland a fertile field, despite the recent slump, and if the recovery is sustained and growth gathers momentum investment should become all the more attractive.

Growing investment

U.S. firms invested an estimated $108 million between 1959 and June 1971, and an additional $62 million is committed. Total U.S. investment in Ireland may be about $200 million.

In the last three months, a number of U.S. firms, including Baxter Labs, Venice Industries, Vile Gollier Fine Arts, Dart Industries, and Cross Pens, have announced they are opening plants in Ireland.

The Irish Government continues to offer incentive grants covering up to 50 percent of fixed assets as well as exemptions from taxes on profits derived from exports.

In recent negotiations, the EEC agreed that Ireland could continue to offer these incentives, that obligations to firms to provide incentives would remain valid even if a particular scheme were terminated, and that if some incentives which do not accord with EEC policy, were eliminated eventually, such as the tax credits, they could be replaced by other incentives. The EEC also agreed to assist Ireland's promotion of economic development.

The retention of these incentives, combined with the greatly enlarged market Ireland will have access to if it joins the Community, should make it even more attractive for American investment.

Nevertheless, American investors should bear in mind the difficulties Irish and other firms are encountering. The home market is relatively small and outside competition has grown severe with the introduction of free trade with the United Kingdom; competition will become even sharper with EEC entry. It is important for any firm investing here to make sure it has some sort of sustainable market.

In addition, while wages remain low, unit costs continue to rise, faster than in most countries in the OECD. The labor scene has calmed significantly since the labor-management agreement achieved late last year, but a new round of negotiations is due in March and no one seems to know what will happen then. In the background is the steady deterioration in the situation in Northern Ireland, which has apparently hurt only the tourist sector of the Irish economy thus far.

Smaller U.S. share

Despite recent improvement in exports, Irish imports continue to comprise about 40 percent of GNP. Well over half come from the United Kingdom. The U.S. share slipped from 8.9 percent in 1969 to 7.0 percent in 1970, suggesting that U.S. exporters have not made an intensive enough effort to exploit the Irish market.

The upward revaluation of other currencies, including sterling, vis-a-vis the dollar which has resulted from the new U.S. economic policy, and a decline in U.S. inflation relative to inflation elsewhere should improve the competitive position of U.S. goods in the Irish market.

Generally, the U.S. import surcharge is not expected to have a serious effect on Irish-U.S. trade. The prospect that the total package could lead to an improved and stabilized monetary system facilitating an expansion of world trade is welcomed by Irish observers.

In the immediate future, U.S. producers may be able to find opportunities to exploit the recently announced $50 million increase in capital spending. The funds will be going into such fields as industrial development, tourism, telecommunications and electricity development, where U.S. technology has a lead.

Singapore's Fast Industrial Growth Broadens Needs

Singapore's economy, maintaining its steady growth pace, has expanded at a 9-10 percent rate this year.

Foreign trade, shipping and banking—traditional activities of Singapore—are moving to record levels. Industry is the fastest growing sector and continues to spearhead the creation of employment opportunities. Construction, both public and private, is at an all-time high.

Regional petroleum developments have turned Singapore into the oil center of the region, while shipbuilding and ship repair industries are experiencing an unprecedented backlog of orders.

Higher wages

The rapid industrial growth of the last few years has been achieved without a corresponding increase in wage rates, and there are signs that the working class may be becoming restive. Wage rates will soon be readjusted to keep pace with the growing economy, reports the U.S. Embassy in Singapore.

Singapore's intention to remain a base for long-term offshore investment and a key location for multinational firms is reflected in recent and contemplated policies. Last year, in an effort to attract export-oriented industries employing highly skilled labor forces, the Government became more selective in the granting of tax incentives; the list of pioneer industries and products was revised to encourage industries of higher technology.

In short, Singapore encourages the foreign investor to bring along with his investment package not only a technology which is higher than usual for this part of the world, but an established market as well. Industrial giants such as

Timex, Karl Hopt of Germany, Sperry-Rand, Mitsubishi Shoji Kaisha, Rollei Werke, Plessey, North American Rockwell, and Phillips are some of the firms which have responded to the call.

In a recent speech the Finance Minister urged Singapore firms to thoroughly modernize and internationalize economic activities so that economic factors, such as the recent U.S. economic moves, will have minimal adverse effects on Singapore's progress. He stated, "It is clear that small countries must be even more agile if they are to be able to cope with such contingencies as uncertain exchange rates and restrictive trade practices."

Singapore is continuing to expedite its growth as the center for investment capital in the region. An optimum investment policy with regard to foreign investment and industrialization continues to insure the promotion of industrial undertakings with worldwide market and high technological content. Maximum effort is also being made to develop the new growth centers of tourism, finance and communications, so they can play a more significant role in economic development.

Master port plan

To prepare for the influx of planes and ships that will follow the rapid expansion of trade, industry, and tourism, a master plan is already under consideration on how air and sea port facilities will be developed for requirements of the 1990s. Decisions on a second runway and future airport development as well as expansion of facilities of seaports will be taken soon.

A comprehensive plan is being prepared for promotion of tourism to Sentosa Island over the next few years. Although tourist arrivals continue to increase in Singapore, there is serious question whether the growth rate alone is enough to occupy the 13,000 hotel rooms that will be completed by the end of 1972. According to recent calculations, Singapore will be approximately 400,000 visitors short of full room occupancy in 1972.

SINGAPORE LOOKS TO THE FUTURE—*A study is under way of port facilities required in the 1990s to keep pace with the economy. Above, the Port of Singapore.*

In the face of these statistics, the Government has slowed down the building of more hotels and tourist shopping complexes, and is placing more emphasis on advertising Singapore's attractions and on encouraging visitors to stay longer than the average two days. More and more tourist amenities are being built and Singapore's suitability as a convention center is being stressed.

Two-way trade between Singapore and the United States continues to grow at an accelerated pace. Singapore's exports to the United States in January-July increased by 32 percent to U.S.$129 million over the corresponding period of 1970. Singapore's imports from the United States totaled $221 million, an increase of 34 percent, making the Republic the fastest growing world market for the United States.

This large increase is related to the startup of new American-financed manufacturing industries and the increased activities of companies searching for offshore oil.

Industrial machinery, electronic measuring equipment, communication equipment, and other high quality capital equipment is finding its way into the expanding market. With the new emphasis on diversification into precision engineering, metal working, etc., requirements for related tools and machinery will be added to the present demand for electronic production, shipyard and oilfield equipment.

More complex market

The emergence of Singapore as a major shipbuilding and ship repair center and the broadening of its industrial base is making the local market more complex. Special metal products, wharfside mechanical equipment, specialized craft, and more complicated machinery are being introduced.

Although the petroleum refinery is and will be the biggest single activity in the foreseeable future, increasingly sophisticated electronics production, metal working, avionics, rig fabrication and chemical production are broadening the range of industrial activities and equipment needs.

Ghana Rates U.S. Business Attention Despite Slow Growth, Payments Bind

Ghana's real economic growth has kept clearly ahead of population growth for the second year in a row, but per capita gross national product has still not regained the level of a decade ago.

Economic policy continues to be directed at liberal structural reform, notably through freeing imports from quantitative controls, reducing the transfer of resources by taxes from the depressed rural sector to the previously favored urban sector, and by promoting domestic savings and investment through higher interest rates.

Heavier taxes on foreign exchange payments and an export bonus system have alleviated somewhat the overvaluation of Ghana's inconvertible currency, the New Cedi. However, the tightness of commercial foreign exchange credits from abroad, rather than the system of temporary import surcharges, has recently been the chief factor limiting Ghanaian imports.

As a result of import liberalization measures adopted during the second half of 1970, notes the U.S. Embassy in Accra, imports increased by 15 percent during the first eight months of 1971 and warehouse stocks of imported goods increased. However, export earnings declined by nearly 19 percent, throwing a previously favorable trade balance into deficit.

The drop in export earnings was largely beyond Ghana's control, the result of lower world market prices for cocoa, which normally accounts for 50 to 60 percent of Ghana's exports by value.

Recent trade actions

While avoiding any general reversion to greater reliance on import licensing controls, the Ghana Government has banned commercial imports of certain items, of which the most important is new passenger cars. It has also implemented an Export Bonus Scheme, under which all exporters of "nontraditional" exports (i.e., other than minerals, cocoa, and timber) will be entitled to a 25 percent bonus on the value of exports which earn convertible currencies or currencies of African countries.

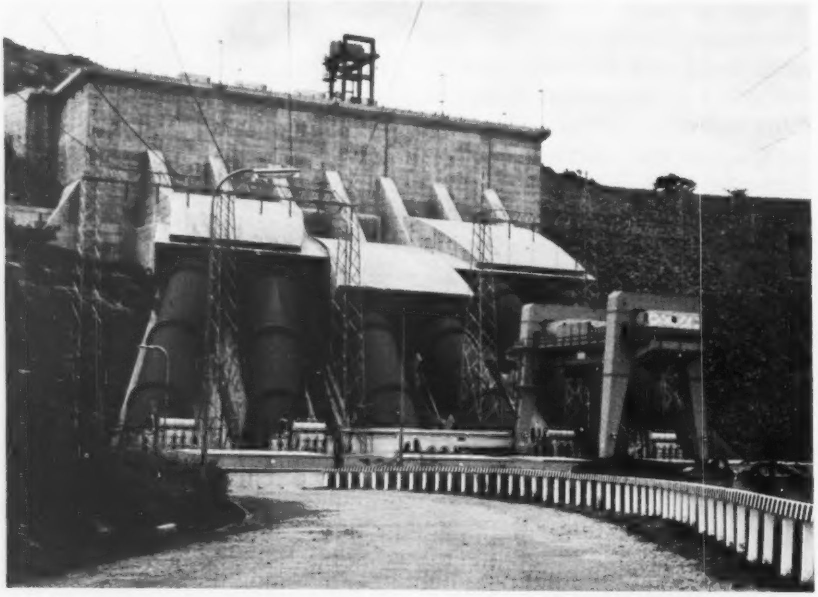
Beginning July 1971 many specified imports became subject to a new system of quality and quantity inspection as well as price comparison before shipment to Ghana. Foreign currency to pay for these goods is not released without a pre-shipment inspection report. This arrangement is intended to minimize recourse to overinvoicing or short shipments as devices to obtain unauthorized private foreign currency balances overseas.

While Ghana copes with its immediate problems and proceeds gradually to restructure its economy along liberal lines subject to increased discipline of market forces, it is at work on a comprehensive multi-year plan intended to chart the way out of the economic stagnation which has characterized the country for a decade. The plan is now well along in the preparation process, and will presumably be used as a basis for discussion with the World Bank-led Consultative Group of countries giving economic assistance to Ghana.

In spite of its slow, although improving, economic growth rate and in spite of its current balance of payments bind, Ghana deserves serious attention as a customer and as a site for investment.

Major potential fields for investment are onshore and offshore petroleum exploitation, bauxite exploitation, and a plant to convert local bauxite into alumina (preparatory to smelting into aluminum).

The under-utilized large artificial port at Tema, near Accra, also provides investment possibilities, such as transshipment operations (including onward air shipment of ocean cargo to distant landlocked African countries, a new and rapidly expanding local activity), expansion of drydock and ship repair facilities to handle large oil tankers and oil exploration rigs, and also



GHANAIAN DAM—*One of Ghana's major investment attractions is an abundance of cheap power. The Akosombo Station, above, serves the Volta Aluminum Co.*

varied free port manufacturing industries designed to serve the West African market.

Some further expansion in the textile industry, now Ghana's largest manufacturing sector, is possible but this depends on development of export markets for specialty prints to other African countries.

New joint ventures

Recent new joint venture investments with Ghana Government agencies as partners include an asbestos cement factory (West German investor) and a ceramics factory (West German and Swiss). Firestone is expanding its successful joint venture in growing rubber and manufacturing tires, and imports of natural crude rubber have now been banned. VALCO, the Volta Aluminum Co., Ltd., wholly-owned by Kaiser and Reynolds, is completing the installation of a fourth potline at its Tema aluminum smelter.

Insofar as Ghana is successful in moving towards higher food production, opportunities for sales of U.S. agricultural commodities will diminish. By the same token, however, the market for U.S. equipment and supplies supporting increased Ghanaian food production should grow. Land clearing and cultivation equipment; processing, chilling and freezing equipment; heavy road transport vehicles; and fishing vessels are examples of promising import lines based on agricultural growth.

Although no new major Ghana Government investment projects involving important offshore procurement of equipment are in the immediate offing, the Government has announced that it will eventually be considering the construction of a satellite communications ground station. Also substantial re-equipment for existing investments, including replacement aircraft for Ghana Airways, is pending.

The Government has also announced plans for a charter airline for domestic service to be operated on a monopoly basis by Ghana Airways. This would require purchases of light aircraft, since there are now no charter aircraft or private general aircraft in Ghana.

GHANA DIVERSIFIES—*Lower world cocoa prices have spurred Ghana's efforts to develop other export items. Here, a mobile crane handles timber at Takoradi Harbor.*

There may also be opportunities for substantial equipment sales and possibly management contracts for ailing state manufacturing enterprises purchased from other countries on a turn-key basis by the former Nkrumah regime; these include two sugar factories which have been operating at a substantial loss, partly because of insufficient local sugar cane, and a flour mill.

New projects

New projects planned by the National Investment Bank which might provide markets for U.S. equipment include chipboard and vegetable oil factories and a poultry hatchery complex.

Ghana continues to maintain a non-discriminatory trade policy. However, because of the recent U.K. decision to join the European Economic Community, Ghana will have to decide whether to accept the offer made to most Commonwealth countries in Africa to negotiate some kind of association or trade agreement with the enlarged EEC. Negotiations for such arrangements do not begin until 1973, and any agreement would not take effect until 1975 or after.

Meanwhile, Ghana has recently legislated a 50 percent increase in tariffs and surcharges for the products of any country which imposes new discriminatory measures against any Ghanaian export product. No immediate target countries for this retaliation measure are evident, but the products of countries which in the future join the EEC and which give preferences to present EEC members and associates without extending the same treatment to Ghana could become liable to the 50 percent higher tariff and surcharge rate.

The United States has a practical commercial interest in any association or trade negotiations between Ghana and the enlarged EEC to the extent that in the past the EEC has always sought and has usually obtained reverse tariff preferences from less developed countries. Such reverse preferences would reduce the competitiveness of U.S. products in the Ghana market.

Text In Currency Agreement; U.S. Drops Import Surcharge

Following is the text of the communique on currency exchange rate relationships issued Dec. 18 at the end of the Washington meeting of the ministers of the Group of Ten:

1. The ministers and central bank governors of the ten countries participating in the general arrangements to borrow met at the Smithsonian Institution in Washington on Dec. 17-18, 1971, in executive session under the chairmanship of John B. Connally, Secretary of the Treasury of the United States. Pierre-Paul Schweitzer, Managing Director of the International Monetary Fund, took part in the meeting, which was also attended by the President of the Swiss National Bank, Dr. Edwin Stopper, and in part by the Secretary-General of the OECD, Jonkheer E. van Lennep, the General Manager of the Bank for International Settlements, Rene Larre, and the Vice-President of the Commission of the EEC, Raymond Barre. The ministers and governors welcomed a report from the Managing Director of the Fund on a meeting held between their deputies and the Executive Director of the Fund.

2. The ministers and governors agreed on an interrelated set of measures designed to restore stability to international monetary arrangements and to provide for expanding international trade. These measures will be communicated promptly to other governments. It is the hope of the ministers and governors that all governments will cooperate through the International Monetary Fund to permit implementation of these measures in an orderly fashion.

3. The ministers and governors reached agreement on a pattern of exchange rate relationships among their currencies. These decisions will be announced by individual governments, in the form of par values or central rates as they desire. Most of the countries plan to close their exchange markets on Monday. The Canadian minister informed the group that Canada intends temporarily to maintain a floating exchange rate and intends to permit fundamental market forces to establish the exchange rate without intervention except as required to maintain orderly conditions.

4. It was also agreed that, pending agreement on longer term monetary reforms, provision will be made for 2¼ per cent margins of exchange rate fluctuation above and below the new exchange rates. The ministers and governors recognized that all members of the International Monetary Fund not attending the present discussions will need urgently to reach decisions, in consultation with the International Monetary Fund, with respect to their own exchange rates. It was the view of the ministers and governors that it is particularly important at this time that no country seek improper competitive advantage through its exchange rate policies. Changes in parities can only be justified by an objective appraisal which establishes a position of disequilibrium.

President Nixon on Dec. 20 issued a Proclamation terminating the additional duty imposed Aug. 15 for balance of payments purposes. The Proclamation, which removes the surcharge with respect to merchandise entered, or withdrawn from warehouse, for consumption on or after Dec. 20, 1971, cited the multilateral agreement reached among the Group of Ten major industrial nations, which permitted removal of the surcharge.

5. Questions of trade arrangements were recognized by the ministers and governors as a relevant factor in assuring a new and lasting equilibrium in the international economy. Urgent negotiations are now under way between the U.S. and the commission of the European Community, Japan, and Canada to resolve pending short-term issues at the earliest possible date and with the European Community to establish an appropriate agenda for considering more basic issues in a framework of mutual cooperation in the course of 1972 and beyond. The U.S. agreed to propose to Congress a suitable means for devaluing the dollar in terms of gold to $38 per ounce as soon as the related set of short-term measures is available for congressional scrutiny. Upon passage of required legislative authority in this framework, the U.S. will propose the corresponding new par value of the dollar to the International Monetary Fund.

6. In consideration of the agreed immediate realignment of exchange rates, the U.S. agreed that it will immediately suppress the recently imposed 10 percent import surcharge and related provisions of the job development credit.

7. The ministers and governors agreed that discussions should be promptly undertaken, particularly in the framework of the IMF, to consider reform of the International Monetary system over the longer term. It was agreed that attention should be directed to the appropriate monetary means and division of responsibilities for defending stable exchange rates and for insuring a proper degree of convertibility of the system; to the proper role of gold, of reserve currencies, and of special drawing rights in the operation of the system; to the appropriate volume of

liquidity; to re-examination of the permissible margins of fluctuation around established exchange rates and other means of establishing a suitable degree of flexibility; and to other measures dealing with movements of liquid capital. It is recognized that decisions in each of these areas are closely linked.

OFDI Rules Ease Year-End Reports

Changes in the Foreign Direct Investment Program that will provide additional flexibility for meeting the 1971 year-end compliance burden of direct investors have been announced by the Office of Foreign Direct Investments. The changes will reduce the extent to which direct investors are led to bunch transactions at year-end during the current period of uncertainty in international monetary conditions.

Direct investors will instead be able to use long-term foreign borrowing and repayment of certain obligations by affiliated foreign nationals made during the first 60 days of 1972 in order to reduce the amount of positive direct investment and comply with the Foreign Direct Investment Regulations during 1971.

In addition, a year-end repatriation requirement for certain proceeds of long-term foreign borrowing that are held abroad has been eliminated for the current year.

The changes are summarized as follows:

► A direct investor may elect to deduct from positive direct investment made during 1971 an amount of previously unused proceeds of any long-term foreign borrowing that have been repatriated to the United States within the first 60 days of 1972.

► Debt obligations (including accounts payable) that are owed by an affiliated foreign national to a direct investor at the end of 1971 and are repaid within the first 60 days of 1972 may be treated as having been satisfied during 1971 to the extent that the direct investor has made a negative net transfer of capital to all affiliated foreign nationals during such sixty-day period. Alternatively, a direct investor may elect to treat repayments made during January 1972 as having been satisfied during 1971 (to the extent of the negative net transfer of capital during January). If the direct investor does not elect either alternative, the direct investor will continue to report repayments by affiliated foreign nationals on the normal calendar year basis.

► The prohibition against making a positive net transfer of capital if a direct investor holds unused proceeds of long-term foreign borrowing in the form of foreign property at year-end has been rescinded for 1971.

E. Europe Export Licenses On Rise

Validated licenses for export of $206.5 million of commodities to Eastern Europe were issued during the third quarter 1971, the Department of Commerce said in its 97th Quarterly Report on Export Control.

This compares with $119 million approved in the previous quarter and $33.1 million in the third quarter 1970. The third quarter 1971 total is exceeded only by the first quarter 1964 license approvals of $334 million, which reflected major purchases of grain by the Soviet Union.

The principal license approvals for exports to Eastern Europe during the third quarter were for vehicle manufacturing equipment valued at $170.9 million, primarily $162 million worth of foundry equipment for the Soviet Kama River truck plant.

Since the third quarter, the Commerce Department has issued further license approvals of $827 million for the Kama River truck plant, bringing total license approvals for the plant to nearly $1 billion.

Other license approvals to the USSR in the third quarter included (in millions of dollars): trucks and truck parts, $10.9; gas field production equipment, $4.3; computers, parts and accessories, $4.0.

Significant commodities licensed to other East European countries included (in millions of dollars): computers, parts and accessories, $1.5 to Czechoslovakia, $1.0 to Poland, and $0.6 to Hungary.

Two-way trade between the United States and Eastern Europe during the second quarter 1971 totaled $152.6 million, compared with $170.9 million in the previous quarter and $135.7 million in the second quarter 1970.

Calendar For World Traders

Jan. 4—Chicago—Automotive Exporters Club meeting, Builders Bldg.

Jan. 4—New York—FCIB luncheon and roundtable conference on international finance, credit, collection and exchange problems, Summit Hotel, noon.

Jan. 6—Cleveland—Monthly meeting of Cleveland World Trade Assn., American Room, Mid-Day Club, 11:30 a.m.

Jan. 11—Chicago—Export seminar, Commerce Field Office.

Jan. 11—Memphis—Seminar on Eximbank and FCIA programs, followed by forum on international currency and finance, Holiday Inn—Rivermont. Sponsors for both events: World Trade Council of Memphis Area Chamber of Commerce, Mid-South Exporters' Roundtable, REEC, Commerce Field Office.

Worldwide Business Services

International trade specialists in the Department of Commerce and Foreign Service Officers in the U.S. Embassies and Consulates around the world are continually developing specific commercial opportunities through which American companies can find buyers, agents, partners or investors overseas. One of the major means for communicating these opportunities promptly and accurately to the U.S. business community is through the columns of this magazine.

The section that follows the list of commercial holidays abroad presents details about U.S.-sponsored overseas exhibits, licensing and joint venture proposals, opportunities to sell to foreign firms and government agencies, appoint agents, details on major construction and expansion projects, and notices of U.S. visits by foreign buyers.

1972 Commercial Holidays Are Listed For 131 Nations

U.S. businessmen visiting London on Aug. 28 will find most business operations at a standstill while the English celebrate their Summer Holiday. A business visit to Japan on Sept. 15 might prove frustrating because the Japanese are observing Respect for the Aged Day.

In fact, there are only a few days in 1972 when there will be no commercial holidays somewhere in the world that will probably close both business and government offices in the celebrating countries.

On this and following pages, commercial holidays are listed for 131 countries around the world. They are presented alphabetically within five regions: Europe, Western Hemisphere, Africa, Far East, and Near East-South Asia.

The list was compiled from data assembled by Commercial Officers at U.S. Foreign Service Posts abroad.

Many commercial holidays occur on different calendar dates from year to year. Holidays and even weekends often vary from country to country, and from region to region. Some holidays do not recur from one year to the next, while other holidays may vary in duration as well as calendar date.

Throughout the list, an asterisk indicates a movable holiday.

For many countries, such as those in the Moslem world, holiday dates can be only approximate because they are based on the lunar calendar. Note that references to the Moslem holidays often vary in spelling and dates, and that businesses in many Moslem countries are closed on Fridays.

The calendar is intended as a working guide only. Corroboration of dates is suggested in final business travel planning.

Although U.S. holidays are not included in this schedule, they should also be considered when appointments are made with U.S. Commercial Officers abroad.

WESTERN HEMISPHERE

ARGENTINA — Jan. 1 (New Year's), Jan. 6 (Epiphany), *Feb. 14-15 (Carnival), *March 30 (Holy Thurs.), *March 31 (Good Friday), May 1 (Labor Day), May 25 (Anniversary of 1810 Revolution), *June 1 (Corpus Christi), June 20 (Flag Day), July 9 (Independence Day), Aug. 15 (Assumption), Aug. 17 (Death of Gen. San Martin), Oct. 12 (Columbus Day), Nov. 1 (All Saints), Dec. 8 (Immaculate Conception), Dec. 25 (Christmas).

Nov. 10 (Day of Tradition) and Nov. 11 (St. Martin de Tours) are observed in the City of Buenos Aires.

BAHAMAS — Jan. 1 (New Year's), *March 31 (Good Friday), *April 3 (Easter Monday), *May 22 (Whit Monday), *June 2 (Labor Day), *July 3 (Queen's Birthday), *Aug. 7 (Emancipation Day), Dec. 25-26 (Christmas).

BARBADOS—March 31 (Good Friday), *April 3 (Easter Bank Holiday), May 1 (Labor Day), *May 22 (Whit Monday), Aug. 7 (Bank Holiday), Oct. 2 (Clerks' Day), Nov. 30 (Independence Day), Dec. 25 (Christmas), Dec. 26 (Boxing Day).

BERMUDA — Jan. 1 (New Year's), *March 31 (Good Friday), May 24 (Empire Day), *June 3 (Queen's Birthday), *Aug. 3 (Cup Match), *Aug. 4 (Somers Day), Nov. 11 (Remembrance Day), Dec. 25 (Christmas), Dec. 26 (Boxing Day).

Government offices are closed Jan. 3, June 5, Nov. 13.

BRITISH HONDURAS — Jan. 1 (New Year's), March 9 (Baron Bliss Day), *March 31 (Good Friday), *April 1 (Holy Saturday), *April 3 (Easter Monday), April 21 (Queen's Birthday) May 1 (Labor Day), May 24 (Commonwealth Day), Sept. 11 (National Day), Nov. 14 (Prince Charles' Birthday), Dec. 25 (Christmas), Dec. 26 (Boxing Day).

Oct. 12 (Colombus Day), Orange Walk and Corozal Districts only).

BOLIVIA—Jan. 1 (New Year's), *Feb. 14-15 (Carnival), March 23 (Abaroa Day), *March 30 (Holy Thurs.), *March 31 (Good Friday), May 1 (Labor Day), *June 1 (Corpus Christi), Aug. 5-7 (Independence Days), Oct. 12 (Columbus Day), Nov. 2 (All Soul's), Dec. 25 (Christmas).

Regional holidays: Feb. 10 (Oruro Day); July 16 (La Paz Day); Sept. 14 (Cochabamba Day); Sept. 24 (Santa Cruz Day).

BRAZIL—Jan. 1 (New Year's), Jan. 20 (St. Sebastian, Rio de Janeiro only), Jan. 25 (Sao Paulo Anniversary, Sao Paulo only), *Feb. 14-15 (Carnival), *Feb. 16 morning (Ash Wednesday), *March 31 (Good Friday), April 21 (Tiradentes), May 1 (Labor Day), *June 1 (Corpus Christi), Sept. 7 (Independence Day), Nov. 2 (All Souls), Nov. 15 (Proclamation of the Republic), Dec. 8 (Immaculate Conception) city of Brasilia only, Dec. 25 (Christmas).

CANADA — Jan. 1-3 (New Year's), *March 31 (Good Friday), *April 3 (Easter Monday), *May 22 (Queen's Birthday), July 3 (Dominion Day), *Sept. 4 (Labor Day), *Oct. 9 (Thanksgiving), Nov. 13 (Remembrance), Dec. 25-27 (Christmas), *Dec. 28 (Boxing Day).

*Regional holidays: Quebec Province only—Jan. 6 (Epiphany), *Feb. 16 (Ash Wednesday), *May 11 (Ascension), June 24 (St. John the Baptist), Nov. 1 (All Saints), Dec. 8 (Immaculate Conception); Newfoundland only —* March 20 (St. Patrick's Day); April 23 (St. George's Day), *June 26 (Discovery Day), *July 10 (Orangemen's Day); Manitoba, Ontario, Al-*

*berta, British Colombia only—*Aug. 7 (Civic Holiday).*

CHILE—Jan. 1 (New Year's), *March 31 (Good Friday), May 1 (Labor Day), May 21 (Battle of Iquique), Aug. 15 (Assumption), Sept. 18-19 (Independence Day), Oct. 12 (Columbus Day), Nov. 1 (All Saints), Dec. 8 (Immaculate Conception), Dec. 25 (Christmas).

COLOMBIA—Jan. 1 (New Year's), Jan. 6 (Epiphany), *March 30 (Holy Thursday), *March 31 (Good Friday), *June 1 (Corpus Christi), *June 9 (Sacred Heart), June 29 (SS. Peter and Paul), July 20 (Independence Day), Aug. 7 (Battle of Boyaca), Aug. 15 (Assumption), Oct. 12 (Columbus Day), Nov. 1 (All Saints), Nov. 11 (Independence of Cartagena), Dec. 8 (Immaculate Conception), Dec. 25 (Christmas).

COSTA RICA—Jan. 1 (New Year's), *March 30 (Holy Thursday), *March 31 (Good Friday), April 11 (Juan Santamaria), May 1 (Labor Day), *June 1 (Corpus Christi), June 29 (SS. Peter and Paul), July 25 (Annexation of Guanacaste), Aug. 2 (Feast of Our Lady of the Angels), Aug. 15 (Assumption), Sept. 15 (Independence Day), Oct. 12 (Columbus Day), Dec. 8 (Immaculate Conception), Dec. 25 (Christmas).

Little business is carried on Dec. 15-Jan. 10.

DOMINICAN REPUBLIC—Jan. 1 (New Year's), Jan. 21 (Day of LaAltagracia), Jan. 26 (Duarte Day), Feb. 27 (Independence Day), *March 31 (Good Friday), May 1 (Labor Day), *June 1 (Corpus Christi), Aug. 16 (Restoration Day), Sept. 24 (Our Lady of Mercy), Dec. 25 (Christmas).

ECUADOR—Jan. 1 (New Year's), Jan. 6 (Epiphany), *Feb. 15 (Carnival), *March 31 (Good Friday), May 1 (Labor Day), May 24 (Battle of Pichincha), July 24 (Simon Bolivar's Birthday), Aug. 10 (Independence Day), Oct. 9 (Guayaguil Independence), Oct. 12 (Columbus Day), Nov. 2 (All Souls), Nov. 3 (Cuenca Independence), Dec. 6 (Founding of Quito), Dec. 25 (Christmas).

EL SALVADOR—Jan. 1 (New Year's), *March 30 (Holy Thursday), *March 31 (Good Friday), May 1 (Labor Day), *Aug. 5-6 (Feasts of San Salvador), Sept. 15 (Independence Day), Oct. 12 (Columbus Day), Nov. 2 (All Souls), Nov. 5 (1st call to Independence), Dec. 25 (Christmas).

Government offices are closed July 31-Aug. 5 and Dec. 15-Jan. 6. Most businesses are closed March 27-30.

GUATEMALA—Jan. 1 (New Year's), *March 30 (Holy Thursday), *March 31 (Good Friday), May 1 (Labor Day), June 30 (Army Day), Aug. 15 (Assumption), Sept. 15 (Independence Day), Oct. 20 (Revolution Day), Nov. 1 (All Saints), Dec. 24-25 (Christmas), Dec. 31 (New Year's Eve).

GUYANA—Jan. 1 (New Year's), *Feb.-March (Eid-Ul-Ahza), Feb. 23 (Republic Day), *Feb. 29 (Phagwah), March 31 (Good Friday), *April 3 (Easter Monday), May 1 (Labor Day), *May-June (Youman Naubi), *Aug. 7 (Commonwealth Day), *Nov. 6 (Deepavali), Dec. 25 (Christmas), Dec. 26 (Boxing Day).

HAITI—Jan. 1 (New Year's Day, Independence Day), Jan. 2 (Ancestors Day), *Feb. 15 (Mardi-Gras), *March 30 (Holy Thursday), *March 31 (Good Friday), April 14 (Pan American Day), May 1 (Agriculture & Labor Day), *May 11 (Ascension), May 18 (Haitian Flag & University Day), May 22 (National Sovereignty Day), *June 1 (Corpus Christi), Aug. 15 (Assumption), Sept. 22 (Anniversary of Pres. Duvalier's taking oath), Oct. 17 (Anniversary of death of Dessalines), Oct. 24 (U.N. Day), Nov. 1 (All Saints' Day), Nov. 2 (All Souls' Day), Nov. 18 (Anniversary of Battle of Vertieres, Armed Forces Day), Dec. 5, (Anniversary of Discovery of Haiti), Dec. 25 (Christmas).

HONDURAS—Jan. 1 (New Year's), *March 30 (Holy Thursday), March 31 (Good Friday), April 14 (Americas' Day), May 1 (Labor Day), June 20 (Dia de San Pedro, San Pedro Sula only), Sept. 15 (Independence Day), Oct. 3 (Morazan), Oct. 12 (Columbus), Oct. 21 (Armed Forces Day), Dec. 25 (Christmas).

Banks are closed on Saturday.

JAMAICA—Jan. 1 (New Year's), *Feb. 16 (Ash Wednesday), *March 31 (Good Friday), *April 3 (Easter Monday), May 23 (Labor Day), *Aug. 7 (Independence Day), *Oct. 16 (National Heroes Day), Dec. 25 (Christmas), Dec. 26 (Boxing Day).

MEXICO—Jan. 1 (New Year's Day). Feb. 5 (Promulgation of Constitution), March 21 (Juarez's Birthday), *March 30 (Holy Thursday), *March 31 (Good Friday), May 1 (Labor Day), May 5 (Battle of Puebla), Sept. 15-16 (Independence Day), Oct. 12 (Columbus Day), Nov. 2 (All Souls' Day), Nov. 20 (Anniversary of the Revolution), Dec. 12 (Our Lady of Guadalupe), Dec. 25 (Christmas).

The last week in May, and Dec. 20-Jan. 6 are traditional vacation periods for government employees. Sept. 1, the President's Address to Congress, is not an obligatory holiday but many offices close.

NETHERLANDS ANTILLES — Jan. 1 (New Year's), *March 31 (Good Friday), *April 3 (Easter Monday), April 30 (Queen's Birthday), May 1 (Labor Day), *May 11 (Ascension), *May 22 (Whit Monday), Dec. 15 (Statute Day), Dec. 25 (Christmas), Dec. 26 (Boxing Day).

NICARAGUA—Jan. 1 (New Year's), *March 28-April 1 (Holy Week), May 1 (Labor Day), May 27 (Army Day), July 14 (Abrogation of the Bryan-Chamorro Treaty), Aug. 10 (St. Domingo), Sept. 14 (Battle of San Jacinto), Sept. 15 (Independence Day), Oct. 12 (Columbus Day), Nov. 2 (All Saints), Dec. 8 (Immaculate Conception), Dec. 25 (Christmas).

The afternoon of Aug. 1 is a holiday in Managua.

PANAMA—Jan. 1 (New Year's Day), *Feb. 15 (Carnival), March 1 (Constitution Day), *March 31 (Good Friday), May 1 (Labor Day), Oct. 11 (Anniversary of 1968 Revolution), Nov. 3 (Independence from Colombia), Nov. 4 (Flag Day), Nov. 28 (Independence from Spain), Dec. 8 (Mother's Day), Dec. 25 (Christmas).

In addition, the following limited holiday observances are usually scheduled: Jan. 2-3 (Mourning for assassinated President Remon), Aug. 15 (Founding of Panama City) observed only in District of Panama, Nov. 5 (Founding of city of Colon) observed only in District of Colon.

PARAGUAY—Jan. 1 (New Year's), Feb. 3 (St. Blaise's Day), March 1 (Heroes' Day), *March 30 (Holy Thurs.), *March 31 (Good Friday), May 1 (Labor Day), May 14-15 (Independence Day), *June 1 (Corpus Christi), June 12 (Peace of Chaco), Aug. 15 (Founding of Asuncion), Aug. 25 (Constitution Day), Sept. 29 (Victory of Boqueron), Oct. 12 (Columbus Day), Nov. 1 (All Saints' Day), Dec. 8 (Our Lady of Caacupe), Dec. 25 (Christmas).

PERU—Jan. 1 (New Year's), *March 30 half-day (Holy Thursday), *March 31 (Good Friday), May 1 (Labor Day), June 24 half-day (Agrarian Reform), June 29 (SS. Peter & Paul), July 28-29 (Independence Days), Aug. 30 (St. Rose of Lima), Oct. 9 (National Dignity Day), Nov. 1 (All Saints), Dec. 8 (Immaculate Conception), Dec. 25 (Christmas).

SURINAM—Jan. 1 (New Year's), *Feb. 29 or March 1 (Holy Phagwa), *March 31 (Good Friday), April 30 (Queen's Birthday), May 1 (Labor Day), May 12 (Ascension), July 1 (Emancipation Day), Nov.-Dec. (Id Ul Fitr), Dec. 25 (Christmas), Dec. 26 (Boxing Day).

TRINIDAD & TOBAGO—Jan. 1 (New Year's Day), *March 31 (Good Friday), *April 3 (Easter Monday), May 1 (Labor Day), *May 22 (Whit Monday), *June 1 (Corpus Christi), *Aug. 7 (Discovery Day), Aug. 31 (Independence Day), Dec. 25 (Christmas), Dec. 26 (Boxing Day).

*Eid ul Fitr (Moslem holiday) is celebrated sometime between Oct. and March, and Divali (Hindu holiday) is celebrated sometime in Oct.-Nov., depending upon lunar phases. Little business is conducted during the National Carnival, *Feb. 14-15.*

URUGUAY—Jan. 1 (New Year's), Jan. 6 (Epiphany), *Feb. 14-15 (Carnival), March 27-31 (Holy Week), April 19 (Crusade of the 33 Liberators), May 1 (Labor Day), May 18 (Battle of Las Piedras), June 19 (Artigas' Birthday), July 18 (Constitution), Aug. 25 (Independence), Oct. 12 (Columbus Day), Nov. 2 (All Souls), Dec. 8 (Day of the Beaches), Dec. 25 (Christmas).

VENEZUELA—Jan. 1 (New Year's), Jan. 6 (Epiphany), Feb. 14-15 (Carnival), *March 29-April 2 (Holy Week), April 19 (Declaration of Independence), May 1 (Labor Day), *May 11

(Ascension), *June 1 (Corpus Christi), June 24 (Battle of Carabobo), June 29 (SS. Peter and Paul), July 5 (Independence Day), July 24 (Bolivar's Birthday), Aug. 15 (Assumption), Oct. 12 (Columbus Day), Nov. 1 (All Saints), Dec. 8 (Immaculate Conception), Dec. 24 half-day (Christmas Eve), Dec. 25 (Christmas), Dec. 31 (New Year's Eve—half-holiday).

Regional holidays: Feb. 3 (Sucre's Birthday), Cumana, State of Sucre; March 10 (Vargas' Day), port of La Guaira; March 19 (St. Joseph), port of Puerto Cabello, State of Carabobo; Nov. 18 (Chiquinquira Day), Maracaibo, State of Zulia.

EUROPE

AUSTRIA—Jan. 1 (New Year's), Jan. 6 (Epiphany), *April 3 (Easter Monday), May 1 (Labor Day), *May 11 (Ascension), *May 22 (Whit Monday), *June 1 (Corpus Christi), Aug. 15 (Assumption), Oct. 26 (National Holiday), Nov. 1 (All Saints), Dec. 8 (Immaculate Conception), Dec. 24 (Bank Holiday), Dec. 25 (Christmas), Dec. 26 (St. Stephan's), Dec. 31 (Bank Holiday).

Regional holidays: March 19 (St. Joseph), Carinthia, Styria, Tyrol, Vorarlberg; Sept. 24 (St. Rupert), Salzburg; Oct. 10 (Plebiscite Anniversary), Carinthia; Nov. 11 (St. Martin), Burgenland; Nov. 15 (St. Leopold), Lower Austria, Upper Austria, Vienna.

Also, many businesses will be closed on the following Fridays which are part of long weekends: Jan. 7, March 31, May 12, June 2, Oct. 27.

BELGIUM—Jan. 1 (New Year's), *April 3 (Easter Monday), May 1 (Labor Day), *May 11 (Ascension), *May 22 (Whit Monday), July 21 (National Holiday), Aug. 15 (Assumption), Nov. 1 (All Saints), Nov. 2 (All Souls), Nov. 11 (Armistice Day), Nov. 15 (Dynasty—King's birthday), Dec. 25 (Christmas).

All metallurgical plants are closed Dec. 2, the traditional holiday of St. Eloi, patron saint of metallurgical workers. The city of Binche celebrates its annual carnival Feb. 13-15.

BULGARIA—Jan. 1 (New Year's), May 1-2 (Labor Day), May 24 (Alphabet Day), Sept. 9-10 (Liberation Day), Nov. 7 (Oct. Revolution Day).

CZECHOSLOVAKIA — Jan. 1 (New Year's), *April 3 (Easter Monday), May 1 (Labor Day), May 8-9 (1945 Liberation), Oct. 28 (National Day), Dec. 25-26 (Christmas).

DENMARK—Jan. 1 (New Year's), *March 30 (Maundy Thurs.), *March 31 (Good Friday), *April 3 (Easter Monday), April 28 (Prayer Day), *May 11 (Ascension), *May 22 (Whit Monday), June 5 (Constitution Day), Dec. 25 (Christmas), Dec. 26 (Second Christmas).

Most industries and banks close at noon on May 1 and June 5.

ENGLAND—*March 31 (Good Friday), *April 3 (Easter Monday), *May 29 (Spring Holiday), *Aug. 28 (Summer Holiday), Dec. 25 (Christmas), Dec. 26 (Boxing Day).

In addition, the Channel Islands observe May 9 (Liberation Day).

Note separate entries for Scotland, N. Ireland and Wales.

FINLAND—Jan. 1 (New Year's), Jan. 6 (Epiphany), *March 31 (Good Friday), *April 3 (Easter Monday), May 1 (May Day), *May 11 (Ascension), *May 22 (Whit Monday), *June 24 (Midsummer's Day), *Nov. 4 (All Saints), Dec. 6 (Independence Day), Dec. 25-26 (Christmas). Banks are closed June 23 and Dec. 24.

FRANCE—Jan. 1 (New Year's), *April 3 (Easter Monday), May 1 (Labor Day), *May 11 (Ascension), *May 22 (Whit or Pentecost Monday), July 14 (Bastille Day), Aug. 15 (Assumption), Nov. 1 (All Saints), Nov. 11 (Armistice Day), Dec. 25 (Christmas).

August is regarded in France as a poor month for conducting business, as most business firms are closed for vacation.

GERMANY—Jan. 1 (New Year's), *March 31 (Good Friday), *April 3 (Easter Monday), May 1 (Labor Day), *May 11 (Ascension), *May 22 (Whit Monday), June 17 (Day of German Unity, *Nov. 22 (Repentance Day), Dec. 25-26 (Christmas).

*Regional holidays: Jan. 6 (Epiphany), Baden-Wuerttemberg, Bavaria; *Feb. 14 (Rose Monday), Bonn, Cologne, Duesseldorf, Mainz, and other Catholic areas celebrating Carnival; *June 1 (Corpus Christi), Hesse, North Rhine-Westphalia, Rhineland-Palatinate, Saarland, and Catholic areas of Baden-Wuerttemberg and Bavaria; Aug. 15 (Assumption), Saarland, Catholic areas of Bavaria; Nov. 1 (All Saint's Day), Baden-Wuerttemberg, North Rhine-Westphalia, Rhineland-Palatinate, Saarland, Catholic areas of Bavaria.*

GREECE—Jan. 1 (New Year's), Jan. 6 (Epiphany), *Feb. 21 (Kathara Deftera), March 25 (Independence), *April 7 (Good Friday), *April 10 (Easter Monday), *April 11 (half holiday after Easter Monday), April 21 (Panhellenic National Day), May 1 (May Day), May 21 (King's Name Day), *May 29 (Whit Monday), June 29 (SS. Peter & Paul), Aug. 15 (Assumption), Sept. 14 (Holy Cross), Oct. 28 (OXI Day), Dec. 25 (Christmas), Dec. 26 (Boxing Day), Dec. 31 (New Year's—half holiday).

Regional holidays: March 7 (Dodecanese Accession Day), celebrated only on the Dodecanese Islands; Oct. 4 (Liberation of Xanthi), only in Xanthi; Oct. 26 (St. Demetrios), only in Thessalonika; Nov. 30 (St. Andreas'), only in Patrus.

HUNGARY—Jan. 1 (New Year's), *April 3 (Easter Monday), April 4 (Liberation Day), May 1 (Labor Day), Aug. 20 (Constitution Day), Nov. 7 (Russian Revolution Day), Dec. 25 (Christmas), Dec. 26 (Boxing Day).

ICELAND — Jan. 1 (New Year's), *March 30 (Maundy Thursday), *March 31 (Good Friday), *April 3 (Easter Monday), *April 20 (First day of summer), May 1 (Labor Day), *May 11 (Ascension), *May 22 (Whit Monday), June 17 (Anniversary of Proclamation of Republic—1944), *Aug. 7 (Bank Holiday), Dec. 24 (Christmas Eve), Dec. 25 (Christmas), Dec. 31 (New Year's Eve).

IRELAND—Jan. 1 (banks only), March 17 (St. Patrick's Day), *March 31 (Good Friday), *April 3 (Easter Monday), June 5 (bank holiday), Aug. 7 (bank holiday), Dec. 25 (Christmas), Dec. 26 (St. Stephen).

ITALY—Jan. 1 (New Year's), Jan. 6 (Epiphany), *April 3 (Easter Monday), April 25 (Liberation Day), May 1 (Labor Day), *May 11 (Ascension), *June 1 (Corpus Christi), June 2 (Founding of the Republic), June 29 (SS. Peter and Paul), Aug. 15 (Assumption), Nov. 1 (All Saints), Nov. 4 (National Unity Day), Dec. 8 (Immaculate Conception), Dec. 25 (Christmas), Dec. 26 (St. Stephen's).

Local holidays: June 24 (St. John), celebrated in Turin, Florence, Genoa; July 15 (St. Rosalia), Palermo only; Sept. 19 (St. Gennaro), Naples only; Nov. 3 (St. Giusto), Trieste only; Dec. 7 (St. Ambrose), Milan only.

LIECHTENSTEIN — Jan. 1 (New Year's), Jan. 6 (Epiphany), Feb. 2 (Candlemas), March 19 (St. Joseph's Day), *March 31 (Good Friday), *April 1 (Holy Sat.), *April 3 (Easter Monday), *May 11 (Ascension), *May 22 (Whit Monday), *June 1 (Corpus Christi), Aug. 15 (Assumption), Sept. 8 (Nativity), Nov. 1 (All Saints), Dec. 3 (St. Luke's Day), Dec. 8 (Immaculate Conception), Dec. 25-26 (Christmas).

LUXEMBOURG—Jan. 1. (New Year's), *Feb. 14 (Shrove Monday), *April 3 (Easter Monday), May 1 (Labor Day), *May 11 (Ascension), *May 22 (Whit Monday), June 23 (Grand Duke's Birthday), Aug. 15 (Assumption Day), Sept. 4 (Fall Fair—Schobermess), Nov. 1 (All Saints), Nov. 2 (All Souls), Dec. 25-26 (Christmas).

MALTA—Jan. 1 (New Year's), Jan. 6 (Epiphany), *Feb. 16 (St. Paul), March 19 (St. Joseph), *March 31 (Good Friday), May 1 (St. Joseph), May 11 (Ascension), *June 1 (Corpus Christi), June 29 (SS. Peter and Paul), Aug. 15 (Assumption), Sept. 8 (Great Siege Day), Sept. 21 (Independence Day), Nov. 1 (All Saints), Dec. 8 (Immaculate Conception), Dec. 25 (Christmas).

Business will moderate during Carnival, Feb. 7-10.

MONACO—Jan. 1 (New Year's Day), Jan. 27 (Sainte Devote), *March 5 (Mi-Careme), *March 31 (Good Friday—half-holiday), *April 3 (Easter Monday), May 1 (May Day), *May 11 (Ascension Day), *May 22 (Pentecost Monday), *May 28 (Fete-Dieu), Aug. 15 (Assumption), Nov. 1 (All Saints), Nov. 19 (National Holiday), Dec. 8 (Immaculate Conception), Dec. 25 (Christmas).

NETHERLANDS—Jan. 1 (New Year's), *March 31 (Good Friday), *April 3 (Easter Monday), April 30 (Queen's

Birthday), *May 11 (Ascension), *May 22 (Whit Monday), Afternoon of Dec. 5 (St. Nicholas Eve), Dec. 25-26 (Christmas).

July 1-15 is summer vacation for the building industry and textile industry. July 29-Aug. 12 is summer vacation for the metalworking industry.

N. IRELAND—March 17 (St. Patrick's), *March 31 (Good Friday), *April 3 (Easter Monday), *May 29 (Spring Holiday), July 12-13 (Orangeman's Day), Aug. 28 (Summer Holiday), Dec. 25 (Christmas), Dec. 26 (Boxing Day).

NORWAY—Jan. 1 (New Year's), *March 30 (Maundy Thurs.), *March 31 (Good Friday), *April 3 (Easter Monday), May 1 (Labor Day), *May 11 (Ascension), May 17 (Constitution Day), *May 22 (Whit Monday), Dec. 25-26 (Christmas).

POLAND—Jan. 1 (New Year's), *April 3 (Easter Monday), May 1 (Labor Day), *June 1 (Corpus Christi), July 22 (National Day), Nov. 1 (All Saints), Dec. 25-26 (Christmas).

PORTUGAL—Jan. 1 (New Year's), *March 31 (Good Friday), April 1 (Holy Saturday), *June 1 (Corpus Christi), June 10 (Portugal Day), June 13 (St. Antonio), Lisbon only, Aug. 15 (Assumption), Oct. 5 (Proclamation of Portuguese Republic), Nov. 1 (All Saints), Dec. 1 (Restoration of Portuguese Independence), Dec. 8 (Immaculate Conception), Dec. 24-25 (Christmas).

ROMANIA—Jan. 1-2 (New Year's), May 1-2 (Labor Day), Aug. 23-24 (National Day).

SCOTLAND—Jan. 1 (New Year's) *May 1 (Spring Holiday), *Aug. 7 (Summer Holiday), Dec. 25 (Christmas).

Other holidays are observed in various cities and towns. In Edinburgh, March 31 (Good Friday), April 17 (Spring Holiday), May 22 (Victoria Day), Sept. 18 (Autumn Holiday). In Glasgow, April 3 (Spring Holiday), May 29 (Queen's Birthday), Sept. 25 (Autumn Holiday).

SPAIN—Jan. 1 (New Year's), Jan. 6 (Epiphany), March 19 (St. Joseph), *March 30 (Maundy Thursday), *March 31 (Good Friday), May 1 (Labor Day), *May 11 (Ascension), *June 1 (Corpus Christi), June 29 (SS. Peter and Paul), July 18 (National Uprising Day), July 25 (Santiago Day), Aug. 15 (Assumption), Oct. 1 (Day of Caudillo), Oct. 12 (Columbus Day), Nov. 1 (All Saints), Dec. 8 (Immaculate Conception), Dec. 25 (Christmas).

*Local holidays: May 15 (St. Isidro) is celebrated in Madrid only; *April 3 (Easter Monday), June 24 (St. John the Baptist), Sept. 24 (Our Lady of Mercy), are celebrated in Barcelona only; June 19 (Liberation Day), and July 31 (St. Ignatius Day), are observed only in Bilbao. Saturdays, until 2 p.m., are working days in Spain.*

SWEDEN—Jan. 1 (New Year's), Jan. 6 (Three Kings Day), *March 31 (Good Friday), *April 3 (Easter Monday), May 1 (Labor Day), *May 11 (Ascension), *May 22 (Whit Monday), *June 23 (Midsummer Eve), *June 24 (Mid-summer Day), *Nov. 4 (All Saints), Dec. 25-26 (Christmas).

Banks, offices and government and commercial institutions will close early on Jan. 5, March 30, May 10, Nov. 3.

SWITZERLAND—Jan. 1 (New Year's), Jan. 2 (Barzelistag), *March 31 (Good Friday), *April 3 (Easter Monday), *May 11 (Ascension), *May 22 (Whit Monday), Aug. 1 (National Day), Dec. 25 (Christmas), Dec. 26 (St. Stephen's).

March 31 (Good Friday) will only be partly observed in the Cantons of Jicino, Valais, Fribourg, Lucerne, Unterwalden, Schwyz, Uri, and St. Gallen.

Thirty other days are observed locally, of which the following are noteworthy for major business centers: Feb. 21, 23 (Carnival), Basel; April 17 (Sechselauten), Zurich; May 1 (Labor Day) major cities; Sept. 9 (Geneva Thanksgiving), Geneva; Sept. 11 (Knabenschiessen), Zurich; Dec. 31 (Restoration Day), Geneva.

U.S.S.R.—Jan. 1 (New Year's), March 8 (Women's Day), May 1-2 (May Day), May 9 (Victory Day), Nov. 7-8 (October Revolution), Dec. 5 (Constitution Day).

WALES—*March 31 (Good Friday), *April 3 (Easter Monday), May 25 (Bank Holiday), Aug. 28 (Bank Holiday), Dec. 25 (Christmas), Dec. 26 (Boxing Day-Bank Holiday).

YUGOSLAVIA—Jan. 1-2 (New Year's), May 1-2 (Int'l Labor Day), July 4 (Fighters Day), Nov. 29-30 (Day of the Republic).

Regional holidays: July 7 (Liberation Day—Serbia), July 13 (Liberation Day—Montenegro), July 22 (Liberation Day—Slovenia), July 27 (Liberation Day—Croatia & Bosnia-Hercegovina), Oct. 11 (Liberation Day —Macedonia).

AFRICA

Note that the country reports in this and following sections reflect varying local spellings as well as varying local dates.

ALGERIA—Jan. 1 (New Year's), *Jan. 26 (Aid El Adha), *Feb. 16 (Muharram), *Feb. 25 (Achoura), *April 26 (Mouloud), May 1 (May Day), June 19 (Anniversary of the 19th June), July 5 (Independence), Nov. 1 (Anniversary of the start of the Revolution), Nov. 7-8 (Aid El Fitr).

ANGOLA—Jan. 1 (New Year's), June 10 (Corpus Christi), Aug. 15 (Restoration Day), Oct. 5 (Republic Day), Nov. 1 (All Saints), Dec. 1 (Independence), Dec. 8 (Immaculate Conception), Dec. 25 (Christmas).

BOTSWANA—Jan. 1-2 (New Year's), March 31 (Good Friday), *April 2 (Easter), *April 3 (Easter Monday), *May 10 (Ascension Day), *May 31 (Whit Monday), *June 1 (President's Day), *June 7 (Commonwealth Day), *Aug. 2 (Bank Holiday), Sept. 30 (Independence Day), Dec. 25 (Christmas), Dec. 27 (Boxing Day).

BURUNDI—Jan. 1 (New Year's), May 1 (Labor Day), *May 11 (Ascension), July 1 (Independence Day), Aug. 15 Assumption), Sept. 18 (Victory of Uprona Party), Oct. 13 (Murder of Hero of State Rwagasore), Nov. 1 (All Saint's Day), Nov. 28 (Anniversary of Republic), Dec. 25 (Christmas).

CAMEROON—Jan. 1 (New Year's), Feb. 11 (Youth Day), *March 31 (Good Friday), *April 3 (Easter Monday), May 1 (Labor Day), *May 11 (Ascension), Aug. 15 (Assumption), Oct. 1 (Reunification Day), Nov. 1 (All Saints), Dec. 10 (Human Rights Day), Dec. 25 (Christmas).

There will be a holiday at the end of Ramadan, the date of which is not yet known.

CENTRAL AFRICAN REPUBLIC—Jan. 1 (New Year's), March 29 (Anniversary of Death of 1st President, Barthelemy Boganda), *April 3 (Easter Monday), May 1 (Labor Day), *May 11 (Ascension), May 15 (Anniversary of Installation of 1st Government), *May 22 (Pentecost), Aug. 14 (Independence), Aug. 15 (Assumption), Nov. 1 (All Saints), Nov. 10 (Anniversary of 1st Election of Boganda to French Nat'l. Assembly), Dec. 1 (Republic), Dec. 25 (Christmas).

CHAD—Jan. 1 (New Year's), *Jan. 11 (National Day), *Jan. 27 (Aid-El-Debir, 70 days after Ramadan), *April 3 (Easter Monday), May 1 (Labor Day), *May 11 (Ascension), *May 21-22 (Pentecost), May 25 (African Continent Liberation Day), *May (Mouloud el Nebi), Aug. 11 (Independence), Aug. 15 (Assumption), Nov. 1 (All Saints), Nov. 28 (Proclamation of the Republic), Dec. 25 (Christmas), *Nov. or Dec. (Aid el Seguir—end of Ramadan).

DAHOMEY—Jan. 1 (New Year's), *March 27 (Easter Monday), May 1 (May Day), May 7 (Presidential Council Day), *May 11 (Ascension), May 22 (Pentecost), Aug. 1 (Independence), Aug. 15 (Assumption), Nov. 1 (All Saints), Dec. 25 (Christmas).

The dates for Ramadan and El Kabir have not yet been determined.

ETHIOPIA—Jan. 7 (Christmas), *Jan. 20 (Epiphany), *Jan. 21 (St. Michael's Day), *March 2 (Victory of the Battle of Adua), *April 7 (Good Friday), *April 10 (Easter Monday), May 5 (Emperor's return), Aug. 22 (Assumption), Sept. 11 (Ethiopian New Year), Sept. 27 (Maskal), Nov. 2 (Emperor's Coronation).

Dates of Christmas and Easter holidays vary from those listed for other countries because Ethiopian calendar differs from Gregorian.

GABON—Jan. 1 (New Year's), *April 2 (Easter), May 1 (Labor Day), *May 11 (Ascension Day), May 21 (Pentecost), Aug. 15 (Assumption), Nov. 1 (All Saints' Day), Dec. 4 (death of Leon M'Ba), Dec. 25 (Christmas).

GAMBIA—Jan. 1 (New Year's), Feb. 18 (National Day), *Jan. 27 (Id-El-Kabujss), *April 14 (Good Friday), *April 17 (Easter Monday), *May 18 (Id-El-Maulud), Aug. 15 (Assumption), *Nov. 25-26 (Id-El-Fitr), Dec. 25 (Christmas), Dec. 26 (Boxing Day).

GHANA—Jan. 1 (New Year's), Feb. 24 (Liberation Day), March 6 (Independence), *March 31 (Good Friday), *April 1 (Holy Saturday), *April 3 (Easter Monday), Oct. 1 (Republic Day), Dec. 25 (Christmas), Dec. 26 (Boxing Day).

GUINEA—Jan. 1 (New Year's), Jan. 28 estimated (Tabaski), *April 26 (Prophet's Birthday), May 1 (Labor Day), May 14 (Anniversary of Parti Democratique de Guinee), Sept. 28 (Referendum Day), Oct. 2 (Independence), Nov. 8 (End of Ramadan), Nov. 22 (Anniversary of the Invasion of Conakry), Dec. 25 (Christmas).

IVORY COAST—Jan. 1 (New Year's), *Jan. 26 est. (Tabaski), *April 3 (Easter Monday), May 1 (Labor Day), *May 11 (Ascension), *May 22 (Pentecost), Aug. 7 (Independence), Aug. 15 (Assumption), Nov. 1 (All Saints), *Nov. 6 est. (End of Ramadan), Dec. 25 (Christmas).

KENYA—Jan. 1 (New Year's), *March 31 (Good Friday), *April 3 (Easter Monday), May 1 (Labor Day), June 1 (Madaraka Day), *Oct. 20 (Kenyatta Day), sometime in Nov. (Idd), Dec. 12 (Independence Day), Dec. 25 (Christmas), Dec. 26 (Boxing Day).

LESOTHO—Jan. 1 (New Year's), March 12-13 (Founder's Day), *March 31 (Good Friday), *April 3 (Easter Monday), May 2 (King's Birthday), May 11 (Ascension), May 24 (Commonwealth Day), *July 3 (Family Day), *Aug. 7 (National Tree Planting Day), *Oct. 2 (National Sports Day), Oct. 4 (Independence), Dec. 25 (Christmas), Dec. 26 (Boxing Day).

LIBERIA—Jan. 1 (New Year's), Jan. 7 (Pioneers' Day), Feb. 11 (Armed Forces Day), *March 10 (Decoration Day), March 15 (J. J. Roberts Day), *April 14 (Day of Fasting & Prayer), May 14 (Unification Day), May 25 (Africa Liberation Day), July 26 (Independence), Aug. 24 (Flag Day), *Nov. 7 (Thanksgiving Day), Nov. 29 (President Tubman's Birthday), Dec. 1 (Matilda Newport Day), Dec. 25 (Christmas).

Most offices will be closed through Jan. 10.

LIBYA—Jan 30 est. (Id al-Adha), *Feb. 19 (Hejira New Year), *Feb. 28 (Ashura Day), March 28 (Evacuation Day), May 1 (Prophet's Day), May 25 (Sudanese National Day), June 11 (Evacuation Day), July 23 (Egyptian National Day), Sept. 1 (Libyan Revolution Day), *Sept. 3 (Alisraa Wal Mearaage), *Sept. 21 (Nesf Shaban), Oct. 7 (Italian Evacuation Day), *Nov. 6 est. (Id al-Fitr).

MALAGASY REPUBLIC—Jan. 1 (New Year's), March 29 (Commemoration of the 1947 Revolt), *April 3 (Easter Monday), May 1 (Labor Day), *May 11 (Ascension Day), *May 22 (Whit Monday), sometime in May (Africa Liberation Day), June 26 (National Day), Aug. 15 (Assumption), Oct. 14 (National Day), Nov. 1 (All Saints), Dec. 25 (Christmas).

MALAWI—Jan. 1 (New Year's), March 3 (Martyr's Day), *March 31 (Good Friday), *April 1 (Easter Saturday), *April 3 (Easter Monday), May 14 (Kamuzu Day), July 6 (Republic Day), Aug. 7 (Bank Holiday), Oct. 17 (Mother's Day), Dec. 25 (Christmas), Dec. 26 (Boxing Day).

MALI—Jan. 1 (New Year's), Jan. 20 (Army Day), *April 3 (Easter Monday), May 1 (Labor Day), May 25 (Day of Africa), Sept. 22 (Independence), Nov. 19 (Liberation), Dec. 25 (Christmas).

The dates of these holidays have not yet been determined for 1972: Tabaski, Mouloud, Ramadan.

MAURITIUS—Jan. 1 (New Year's), *Jan. 28 est. (Id El Adha), *Jan. 30 (Cavadee), *Feb. 13 (Maha Shivaratree), *Feb. 15 (Chinese Spring Festival), March 12 (Independence), May 1 (Labor Day), Nov. 1 (All Saints Day), *Nov. 5 (Divali), *Nov. 10 est. (Id El Fitr), Dec. 25 (Christmas).

MOROCCO—Jan. 1 (New Year's), March 3 (Throne Day), *March 29 (Passover), *April 3 (Easter Monday), May 1 (Labor Day), *May 11 (Ascension), *May 22 (Whit Monday), Aug. 15 (Assumption), *Sept. 8 (Rosh Hashana), *Sept. 17 (Yom Kippur), Nov. 1 (All Saints), Nov. 18 (Independence), Dec. 25 (Christmas).

The following are approximate dates for Moslem holidays, which cannot be fixed in advance: Jan. (Aid el Kebir), Feb. (Moslem New Year), Feb. (Achoura), April (Mouloud), Nov. (Aid el Fitr). Banks are closed the afternoons of April 27 and Sept. 16. During the Moslem month of Ramadan, running approximately Oct. 11 to Nov. 10, banks are open from 9:30 a.m. to 2 p.m.; Moroccan Gov't offices, 9 a.m.-2 p.m. The above list includes Moslem, Christian and Jewish holidays observed by the banks, but not all are observed by all businesses or government agencies.

MOZAMBIQUE—Jan. 1 (New Year's), *June 1 (Corpus Christi), June 10 (Portugal Day), July 25 (Lourenco Marques), Aug. 15 (Assumption), Oct. 5 (Republic Day), Nov. 1 (All Saints), Dec. 1 (Independence), Dec. 8 (Immaculate Conception), Dec. 25 (Christmas).

NIGER—Jan. 1 (New Year's), *April 3 (Easter Monday), May 1 (Labor Day), *May 11 (Ascension Day), *May 22 (Pentecost Monday), Aug. 3 (Independence), Aug. 15 (Assumption Day), Dec. 18 (Republic Day), Dec. 25 (Christmas).

Three Moslem holidays depend upon the lunar calendar: Tabaski, Mouloud, Korite.

NIGERIA—Jan. 1 (New Year's), *Jan. 26-27 (Ed-El-Kabir), March 21 (Good Friday), *April 3 (Easter Monday), *April 26 (Ed-El-Maulud), Oct. 1-2 (National Day), *Nov. 9 (Ed-El-Fitr), Dec. 25 (Christmas), Dec. 26 (Boxing Day).

RWANDA—Jan. 1 (New Year's), Jan. 28 (Democracy Day), *April 3 (Easter Monday), May 1 (Labor Day), *May 11 (Ascension), May 21 (Pentecost), July 1 (Independence), Aug. 15 (Assumption), Sept. 3 (President's Patron Saint's Day), Sept. 25 (National Assembly Day), Oct. 26 (Gov't Day), Nov. 1 (All Saints), Nov. 24 (Justice Day), Dec. 25 (Christmas).

SENEGAL—Jan. 1 (New Year's), *April 3 (Easter Monday), April 4 (National Day), May 1 (Labor Day), *May 11 (Ascension), *May 22 (Pentecost), July 14 (African Community Day), Aug. 15 (Assumption), Nov. 1 (All Saints), Dec. 25 (Christmas).

The dates of these three Moslem holidays have not yet been determined: Mouloud, Tabaski, Korite.

SIERRA LEONE—Jan. 1 (New Year's), *March 31 (Good Friday), *April 3 (Easter Monday), April 27 (Independence), *May 22 (Whit Monday), Aug. 7 (Bank Holiday), Dec. 25 (Christmas), Dec. 26 (Boxing Day).

In addition, three movable Moslem holidays, the dates of which cannot be fixed in advance; Eid-Ul-Fitri, Eid-Ul-Adha, Moulid-Un-Nabi.

SOMALIA—2 days late January (Idd El-Fitr), May 1 (Labor Day), sometime in May (Prophet's Birthday), June 26, July 1 (Independence), 2 days mid-Oct. (Idd El-Adha), Oct. 21-22.

All businesses are closed on Friday.

SOUTH AFRICA—Jan. 1 (New Year's), *March 31 (Good Friday), *April 3 (Easter Monday), *April 6 (Van Riebeeck Day), *May 11 (Ascension), June 1 (Republic Day), *July 13 (Family Day), *Sept. 7 (Settlers Day), Oct. 10 (Kruger Day), Dec. 16 (Day of the Covenant), Dec. 25 (Christmas), Dec. 26 (Boxing Day).

SUDAN—Jan. 1 (Independence and New Year's), *Jan. 29-Feb. 2 (Kurban Bairam), *Feb. 15 (Moslem New Year), *April 13 (Sham Al Naseem), *April 28 (Prophet's Birthday), May 25 (May Revolution), Sept. 1 (September Revolution), Oct. 21 (Revolution Day), *Nov. 7-10 (Ramadan Bairam), Dec. 25 (Christmas).

Businesses are closed on Fridays.

SWAZILAND—Jan. 1 (New Year's), *Jan. 4 (Incwala), *March 31 (Good Friday), *April 3 (Easter Monday), April 25 (Flag Day), May 11 (Ascension Day), June 12 (Commonwealth Day), July 22 (King's Birthday), *Aug. 28 (Reed Dance), Sept. 6 (Independence), Dec. 25 (Christmas), Dec. 26 (Boxing Day).

TANZANIA—Jan. 12 (Zanzibar Revolution Day), Jan. 27 est. (Id-el-Haj), *April 7 (Good Friday), *April 10 (Easter Monday), April 26 (Union Day and Maulid Day), May 1 (Int'l Workers Day), July 7 (Saba Saba Day), Nov. 2 est. (Id-el-Fitr), Dec. 9 (Independence & Republic Day), Dec. 25 (Christmas).

TOGO—Jan. 1 (New Year's), Jan. 13 (National Liberation Day), *April 3 (Easter Monday), April 27 (Independence), May 1 (Labor Day), *May 11 (Ascension Day), *May 22 (Whit Monday), June 21 (National Day of Mourning), Aug. 15 (Assumption), Nov. 1 (All Saints), Dec. 25 (Christmas).

TUNISIA—Jan. 1 (New Year's), Jan. 18 (Remembrance Day), *Jan. 26 (Aid El Kebir), *Feb. 15 (Ras El AmEl Hijri), March 20 (Independence), April 9 (Martyrs' Day), *April 26 (El Mouled), May 1 (Labor Day), June 1-2 (Victory Day), July 25 (Republic Day), Aug. 3 (President's Birthday), Aug. 13 (Women's Day), Oct. 15 (Evacuation of Bizerte), *Nov. 8-9 (Aid Esseghir).

UGANDA—Jan. 1 (New Year's), Jan. 25 (Second Republic Day), *March 31 (Good Friday), *April 3 (Easter Monday), May 1 (Labor Day), Oct. 9 (Independence), Dec. 25 (Christmas), Dec. 26 (Boxing Day).

The date of Idd el Fitr depends on lunar observance and is not yet known.

UPPER VOLTA—Jan. 1 (New Year's), *April 3 (Easter Monday), May 1 (Labor Day), *May 11 (Ascension), Nov. 1 (All Saints), Dec. 11 (Independence), Dec. 25 (Christmas).

Three Moslem holidays depend upon the lunar calendar: Tabaski, Mouloud, Korite.

ZAIRE—Jan. 1 (New Year's), Jan. 4 (Martyrs of Independence), *April 3 (Easter Monday), May 1 (Labor Day), *May 11 (Ascension), May 20 (National Party Day), *May 21 (Pentecost), June 30 (Independence), Aug. 15 (Assumption), Nov. 1 (All Saints'), Nov. 11 (Martyrs), Nov. 17 (Army Day), Nov. 24 (Anniversary of the New Regime), Dec. 25 (Christmas).

ZAMBIA—Jan. 1 (New Year's), *March 31 (Good Friday), *April 1 (Holy Saturday), *April 3 (Easter Monday), May 1 (Labor Day), *May 22 (Whit Monday), May 25 (African Freedom Day), July 3 (Heroes Day), July 4 (Unity Day), Aug. 14 (Youth Day), Oct. 24 (Independence), Dec. 25 (Christmas), Dec. 26 (Boxing Day).

NEAR EAST-SOUTH ASIA

AFGHANISTAN—*Feb. 14-17 (Eid al-Qorban), March 21 (New Year's), *March 18 (Ashura), May 27 (Independence), Aug. 23-25 (Independence Festival), Aug. 31 (Pushtunistan Day), Sept. 9 (National Assembly Day), Oct. 15 (Deliverance Day), *Dec. 1-3 (Eid al-Fetr).

The regular weekend holiday is from Thursday noon through Friday. Saturday and Sunday are regular workdays.

BAHRAIN—Jan. 1 (New Year's), *Jan 28-31 est. ('Id al Haj), *March 1 est. (Ashura), *May 1 est. (Prophet's Birthday), *Nov. 10-12 est. ('Id al-Fitr), Dec. 16 (Accession Day).

BURMA—Jan. 4 (Independence), Feb. 12 (Union Day), *Feb. 28 (Full Moon of Tabaung), March 2 (Peasants' Day), March 27 (Resistance Day), *April 13-15 (Water Festival), *April 16 (New Year's), *April 27 (Full Moon of Kason), May 1 (Workers' Day), July 19 (Martyrs' Day), *July 25 (Full Moon of Waso), *Oct. 22 (Full Moon of Thadingyut), *Nov. 20 (Full Moon of Tazaungmon), *Nov. 30 (National Day), Dec. 25 (Christmas).

CEYLON—Jan. 1 (National Heroes' Day), *Jan. 15 (Tamil Thaipongol), *Jan. 27 (Hadji Festival), *Jan. 29 (Maha Poya), Feb. 4 (Independence), *Feb. 13 (Maha Sivarathri), *Feb. 28 (Maha Poya), *March 28 (Maha Poya), *March 31 (Good Friday), *April 12-13 (Sinhala and Tamil New Year), *April 27 (Maha Poya and Prophet's Birthday), May 1 (May Day), *May 27-28 (Maha Poya-Wesak), *June 26 (Maha Poya), *July 25 (Maha Poya), *Aug. 24 (Maha Poya), *Sept. 22 (Maha Poya), Sept. 26 (Bandaranaike Day), *Oct. 22 (Maha Poya), *Nov. 4 (Deepavali), *Nov. 8 (Ramazan Festival), *Nov. 20 (Maha Poya), *Dec. 20 (Maha Poya), Dec. 25 (Christmas).

CYPRUS—Jan. 1 (New Year's), Jan. 6 (Epiphany), Jan. 19 (Arch. Makarios Name Day), Jan. 27 (Kurban Bayzam), Feb. 21 (Green Monday), March 25 (Greek Independence Day), *April 7 (Good Friday), *April 8 (Holy Saturday), *April 9 (Easter), *April 10 (Easter Monday), April 23 (Children's Day & Opening of the Turkish Grand Nat'l Assembly), *April 26 (Birthday of the Prophet), May 19 (Turkish Youth Day), Aug. 15 (Cyprus Independence Day), Aug. 30 (Turkish Victory Day), Oct. 28 (OXI Day), Oct. 29 (Turkish Republic Day), *Nov. 8 (Ramazam Bayram), Dec. 24-25 (Christmas), Dec. 26 (Proxiny Day).

EGYPT—Jan. 1 (New Year's), *Jan. 26 (Kurban Bairam), *Feb. 15 (Islamic New Year's), April 10 (Sham El Nessim), *April 27 (Mouled El Nabi), June 18 (Evacuation Day), July 23 (Revolution Day), *Nov. 8 (Ramadan Bairam).

Because Islamic religious holidays depend on observation of the new moon, they can only be approximated at this time.

Holidays for Kurban and Ramadan Bairam begin on the eve of the feast and last five days for the former and four days for the latter.

INDIA—Jan. 1 (New Year's), Jan. 26 (Republic Day), *Jan. 27 (Id-uz-zuha), *Feb. 26 (Muhaeram), *Feb. 28 & 29 (Holi), *March 23 (Ramnavami), *March 27 (Mahavir Jayanti), *March 31 (Good Friday), *April 13 (Baisakhi), Aug. 15 (Independence), *Aug. 24 (Raksha Bandhan), *Aug. 31 (Janamashtami), Oct. 2 (Mahatma Gandhi's Birthday), *Oct. 16-17 (Dussehra), *Nov. 5 (Diwali), *Nov. 6 (Goverdhan Puja), *Nov. 8 (Id-ul-Fitr), *Nov. 20 (Guru Nanak's Birthday), Dec. 25 (Christmas).

IRAN—*Jan. 27 (Id-e Ghorban), *Feb. 4 (Id-e Ghadir), *Feb. 26 (Ashura), March 21-25 (Now-Ruz), April 2 (Sizdeh), *April 13 (Death of the Prophet and Imam Hassan), Aug. 5 (Constitution Day), *Sept. 6 (Mabass), *Sept. 24 (Birthday of the 12th Imam), Oct. 26 (Birthday of the Shah), *Oct. 29 (Martyrdom of Imam Ali), *Nov. 8 (Id-el Fetr), *Dec. 2 (Death of Imam Jaafar Sadegh), *Dec. 18 (Birthday of Imam Reza).

The weekend is from Thursday noon through Friday.

Although government offices and businesses are open from March 26-April 1, many key employees may not be present since many people go on holidays over Now-Ruz from March 21-April 3.

ISRAEL—*March 30 (First Day of Passover), *April 5 (Last Day of Passover), *April 19 (Independence), *May 19 (Pentecost), *Sept. 9 (First Day of Rosh Hashana), *Sept. 10 (Second Day of Rosh Hashana), *Sept. 18 (Yom Kippur), *Sept. 23 (First Day of Tabernacles), *Sept. 30 (Last Day of Tabernacles).

On Fridays, and days preceding holidays, businesses close at 1 p.m. Sundays are working days in Israel and on Saturdays all businesses are closed.

Banks are closed Feb. 29 (Purim) and July 20 (Commemoration of the Destruction of the Temple).

JORDAN—Jan. 1 (New Year's), Jan. 15 (Arbor Day), Jan. 17 (Arab Summit Conference), *Jan. 27 (Id Al Adha), *Feb. 17 (Moslem New Year), March 8 (King's Coronation), March 22 (Arab League Day), *March 30 (Prophet's Birthday), May 25 (Independence), Aug. 11 (Coronation Day), *Sept. 9 (Ascension), *Nov. 5 (Id-Al-Fitr), Nov. 13 (Arab Renaissance Day), Nov. 14 (King's Birthday), Dec. 25 (Christmas).

Commercial establishments do not necessarily close on holidays. Many Moslem and Christian establishments close on Fridays, Christian businesses on Sundays.

KUWAIT—Jan. 1 (New Year's), Feb. 25 (National Day), *Feb. 26 (Id al-Adha), March 19 (Moslem New Year), *Dec. 10 (Id al-Fitr).

LEBANON—Jan. 1 (New Year's), *Jan. 26 (Feast of Al-Adha), Feb. 9 (St. Maron), *Feb. 15 (Moslem New Year), *March 22 (Arab League Day), *March 31 (Good Friday-Catholic), *April 3 (Easter Monday-Catholic), *April 7 (Good Friday-Greek Orthodox), *April 10 (Easter Monday Greek Orthodox), *April 25 (Prophet's Birthday), May 1 (Labor Day), May 6 (Martyr's Day), May 11 (Ascension), Aug. 15 (Assumption), Nov. 1 (All Saints), *Nov. 7 (Feast of Ramadan), Nov. 22 (Independence), Dec. 25 (Christmas).

NEPAL—*Jan. 11 (Prithvi Jayanti), *Jan. 21 (Basant Panchami), *Feb. 13 (Shivaratri), *Feb. 28 (Holi), *March 15 (Ghode Jatra), *March 22 (Chaitra Ashtami), *March 23 (Ram Nawami), *April 13 tentative (New Year's Day), *June 12 (King Mahendra's Birthday), *June 30 (Tribhuvan Jayanti), *Aug. 24 (Janai Purnima), *Aug. 25 (Gai Jatra), *Aug. 31 (Krishna Jayanti), *Sept. 10 (Tij), *Sept. 12 (Rishi Panchami), *Sept. 22 (Indra Jatra), *Oct. 8 (Ghatasthapana), *Oct. 15-22 (Dashain), *Nov. 5-7 (Tihar), *Dec. 15 (Constitution Day).

Jan. 30 (Martyrs' Day) is a half holiday for Kathmandu only. March 8 (Women's Day) is a holiday for women only. Oct. 24 (UN Day) is a half holiday.

PAKISTAN—*Jan. 27-28 (Id-ul-Azha), *Feb. 26 (Muharram [Ashura]), March 23 (Pakistan Day), *April 27 (Id-i-Milad-un-Nabi), July 1 (bank holiday), Aug. 14 (Independence), Sept. 6 (Defense of Pakistan Day), Sept. 11 (Death Anniversary of Quaidi-Azam), *Nov. 3 (Jumatul Wida), *Nov. 8-9 (Id-ul-Fitr), Dec. 25 (Birthday of Quaid-e-Azam and Christmas).

SAUDI ARABIA—*Jan. 25-30 (Id-al Adha), Sept. 23 (National Day), *Oct. 9-Nov. 6 (Ramadan), *Nov. 7-13 (Id-al-Fitr).

With the exception of National Day, the above dates are approximate; they are based on the lunar calendar. Although the month of Ramadan is not a holiday, there is considerable interruption of business activity.

TURKEY—Jan. 1 (New Year's), *Jan. 27-29 (Feast of Sacrifice), May 1 (Spring Day), May 19 (Youth & Sports Day), May 27 (Freedom & Constitution Day), Aug. 30 (Victory Day), Oct. 30 (Turkish Independence), *Nov. 8-11 (Feast of Sugar).

May 26 is half-day holiday (p.m. only). When a legal holiday ends on a Friday, the next day also is recognized as a holiday.

YEMEN—*Jan. 26 est. (Idd Al Haj), *Feb. 18 est. (New Year), *April 29 est. (Prophet's Birthday), Sept. 26-28 (Revolution Day), Oct. 14 (Revolution Day), Nov. 5 (National Day), *Nov. 24-27 est. (Idd Al Fitr), Nov. 30 (Independence).

FAR EAST

AUSTRALIA—Jan. 3 (New Year's), *Jan. 31 (Australia Day), *March 31 (Good Friday), *April 3 (Easter Monday), April 25 (ANZAC Day), Dec. 25 (Christmas), Dec. 26 (Boxing Day).

*Regional Holidays: *Jan. 26 (Hobart Cup), Southern Tasmania; *Feb. 8 (Hobart Regatta Day), Hobart; *Feb. 23 (Launceston Cup), Northern Tasmania; *March 6 (Eight-Hour Day), Tasmania, (Labor Day), Western Australia; *March 13 (Labor Day), Victoria; *April 4 (Easter Tuesday), Victoria; *May 1 (Labor Day), Queensland; *May 15 (Adelaide Cup Day), South Australia; *June 5 (Foundation Day), Western Australia; *June 12 (Queen's Birthday), all states except Western Australia; *Aug. 7 (Bank Holiday), Australian Capital Territory and New South Wales; *Aug. 16 (Exhibition Day), Queensland; *Sept. 27 (Show Day), Western Australia; *Sept. 28 (Melbourne Show Day), Melbourne; *Oct. 2 (Labor Day), Australian Capital Territory and New South Wales; *Oct. 9 (Labor Day), South Australia, (Queen's Birthday), Western Australia; *Oct. 12 (Launceston Show), Northern Tasmania; *Oct. 26 (Hobart Show), Hobart; *Nov. 6 (Bank Holiday), Northern Tasmania; *Nov. 7 (Melbourne Cup Day), Melbourne.*

CAMBODIA—Jan. 1 (New Year's), Feb. 4 (Festival of Genies), Feb. 11 (Buddha's Birthday), *Feb. 15-17 est. (Chinese New Year), *April 13-15 est. (Chaul Chhnam), *May 9-10 est. (Visakhabuchea), *Sept. 18-20 est. (Pchum Bn), Oct. 9 (Proclamation Day), Oct. 24 (UN Day), Dec. 10 (Human Rights), Dec. 25 (Christmas).

HONG KONG—Jan. 1 (first weekday in Jan.), *Feb. 15-17 (Chinese New Year), *March 31 (Good Friday), *April 1 (day following Good Friday), *April 3 (Easter Monday), *April 5 (Ching Ming Festival), April 21 (Queen's Birthday), *June 15 (Tuen Ng Festival), July 1 (first weekday in July), *Aug. 7 (first Monday in August), *Aug. 28 (Liberation Day), *Sept. 23 (day following Chinese Mid-Autumn Festival), *Oct. 16 (day following Chung Yeung Festival), Dec. 25-26 (Christmas).

INDONESIA—Jan. 1 (New Year's), *Jan. 27 (Idul Adha), *Feb. 16 (1 Muharam 1391 H.), *March 31 (Good Friday), *April 2 (Easter), *April 26 (Prophet's Birthday), Aug. 17 (Independence), *Sept. 5 (Ascension of Mohamed), *Nov. 7-8 (Idul Fitri), Dec. 25 (Christmas).

The Islamic month of fasting, Ramadhan, begins Oct. 10. During the following lunar month (28 days), government offices and many businesses work a shorter business day, generally 8 a.m.-12 noon.

JAPAN—Jan. 1-3 (New Year's), Jan. 15 (Adult's Day), Feb. 11 (Nat'l Foundation Day), *March 21 (Vernal Equinox Day), April 29 (Emperor's Birthday), May 3 (Constitution Day), May 5 Children's Day), Sept. 15 (Respect for the Aged Day), *Sept. 24 (Autumnal Equinox Day), Oct. 10 (Sports Day), Nov. 3 (Culture Day), Nov. 23 (Labor Thanksgiving Day).

KOREA—Jan. 1-3 (New Year's), March 1 (Independence Movement Day), April 5 (Arbor Day), June 6 (Memorial Day), July 17 (Constitution Day), Aug. 15 (Independence), *Sept. 22 (Thanksgiving), Oct. 3 (National Foundation Day), Oct. 9 (Alphabet Day), Oct. 24 (UN Day), Dec. 25 (Christmas).

LAOS—Jan. 1 (New Year's), *Jan. 30 (Buddhist All Saints), *Feb. 15-17 (Chinese New Year), March 1 (War Victims Day), March 23 (Army Day), *April 13-15 (Lao New Year), *April 27 (Buddha), *April 28 (Rocket Festival), May 1 (Labor Day), May 11 (Constitution Day), July 19 (Independence), *July 25 (Beginning of Buddhist Lent), *Sept. 7 (Rice Growing Day), *Sept. 22 (Rice Donation Day), *Oct. 22 (End of Buddhist Lent), *Oct. 23 (Boat Racing Day), Oct. 24 (UN Day), *Nov. 18-21 (That Luang Festival).

MALAYSIA—Jan. 1 (New Year's), *Jan. 27 (Hari Raya Haji), Feb. 15-16 (Chinese New Year), *April 26 (Birthday of Prophet), May 27 (Wesak Day), June 7 (Birthday of H.M. Yang di-Pertuan Agong), Aug. 31 (Malaysia Day), *Nov. 7-8 (Hari Raya Puasa), Dec. 25 (Christmas).

*Regional holidays: Jan. 30 (Thaipusam), Penang; March 8 (Birthday of H.R.H. Sultan of Selangor), Selangor; *March 31 (Good Friday), Sabah, Sarawak; *April 1 (Easter Saturday), Selangor, Sabah; *April 3 (Easter Monday), Sabah, Sarawak; June 1-2 (Dayak Festival), Sarawak; July 6 (Birthday of H.E. Governor of Sarawak), Sarawak; *Nov. 4 (Deepavali), West Malaysia; Dec. 26 (Boxing Day), Sabah, Sarawak.*

NEW ZEALAND—Jan. 1 (New Year's), *March 31 (Good Friday), *April 1 (Easter Saturday), April 3 (Easter Monday), April 25 (ANZAC Day), June 5 (Queen's Birthday), *Oct. 23 (Labor Day), Dec. 25 (Christmas), Dec. 26 (Boxing Day).

*Regional holidays: *Jan. 24 (Wellington Day), *Jan. 31 (Auckland Day), *Jan. 31 (Nelson Day), *March 23 (Christchurch Day). Dec. 15-Jan. 17, businesses operated with a minimal staff.*

PHILIPPINES—Jan. 1 (New Year's), *March 30 (Holy Thurs.), *March 31 (Good Friday), April 10 (Bataan Day), May 1 (Labor Day), June 12 (Independence), July 4 (Philippine-American Friendship Day), Nov. 30 (Bonifacio Day), Dec. 25 (Christmas), Dec. 30 (Rizal Day).

June 24 (Manila Day), is observed in Manila only.

SINGAPORE—Jan. 1 (New Year's), *Jan. 26 (Hari Raya Haji), *Feb. 15-16 (Chinese New Year), *March 31 (Good Friday), May 1 (Labor Day), May 27 (Vesak Day), Aug. 9 (National Day), *Nov. 5-6 (Deepavali), *Nov. 9 (Hari Raya Puasa), Dec. 25 (Christmas).

SOUTH VIET-NAM—Jan. 1 (New Year's), Jan. 27 (Buddha's Illumination), *Feb. 14-17 (Lunar New Year —Tet), *March 20 (Trung Sisters Anniversary), April 23 (Hung Vuong Anniversary), May 1 (Labor Day), *Sept. 27 (Anniversary of Tran Hung Dao), *Oct. 4 (Confucius Anniversary), Nov. 1 (Anniversary of the Revolution), Dec. 25 (Christmas).

TAIWAN—Jan. 1-3 (New Year's), *Feb. 15-16 (Chinese New Year—Spring Festival), March 29 (Youth Day), *June 15 (afternoon only, Dragon Boat Festival), *Sept. 22 (afternoon only, Mid-Autumn Festival), Sept. 28 (Confucius' Birthday—Teachers' Day), Oct. 10 (National Day), Oct. 25 (Taiwan Restoration Day), Nov. 12-13 (Dr. Sun Yat-sen's Birthday), Dec. 25 (Constitution Day).

Oct. 31 (Pres. Chiang Kai-shek's Birthday) is not an official holiday, but widely observed. In addition, many non-official and religious holidays are celebrated by various segments of the population. While businesses are not closed, businessmen may not be available. Most businesses will be closed following Chinese New Year through Feb. 19.

THAILAND—Jan. 1-3 (New Year's), *Feb. 15 (Chinese New Year—No Government Holiday), *Feb. 28 (Makha Bucha), April 6 (Chakri), April 13 (Songkran), May 1 (Labor Day), May 5 (Coronation Day), May 8 (Ploughing Ceremony—Government Holiday only), *May 27 (Wisakha Bucha), July 1 (Midyear Holiday—banks only), *July 25-26 (Asalaha Bucha—Buddhist Lent), Aug. 14 (Queen's Birthday), Oct. 23 (Chulalongkorn Day), Dec. 5 (King's Birthday), Dec. 11 (Constitution), Dec. 25 (Christmas—No Government Holiday), Dec. 31 (New Year's Eve).

Licensing, Investment Abroad

Licensing and investment proposals from foreign firms are listed in these columns. Specific product interests in each proposal are highlighted in bold type to facilitate identification and each proposal is preceded by the appropriate four-digit product number taken from the Standard Industrial Classification (SIC) Manual.

Background information on opportunities abroad and assistance on overseas investments are available from the Office of International Investment, BIC-878, U.S. Department of Commerce, Washington, D.C. 20230. "P" numbers should be used when responding to specific proposals.

WTD indicates that a World Trade Directory Report containing financial and background information on the foreign firm is available for $2 from the Department of Commerce, BIC-924, Washington, D.C. 20230, or from any Commerce Field Office.

ALGERIA—The Ministry of Agriculture and Agrarian Reform has expressed interest in American business and agricultural participation in its extensive investment program. Indicating a high regard for American technical advances in agriculture, the Secretary General of the Ministry hopes to attract U.S. bids leading to active American participation in the planned developments.

Development plans call for substantial modernization of existing facilities in the fields of **dairy products, livestock production, poultry products, animal feeds, fruit and vegetable storage facilities and agricultural machinery maintenance**.

Planned facilities in dairy products include a condensed sweetened milk plant, two dairies with cheese and butter production capabilities and four or five installations for raising milk cows.

Livestock facilities contemplated include a National Center for Productivity plus three Regional Centers, each with ten to fifteen outlets. Services to be provided will include production of semen and artificial insemination, "Herd Book" control and milk control services. Four livestock sales centers for breeding animals will require equipment for stables and animal transport. Other facilities will include three assembly and fattening stations for sheep, three veterinary laboratory trucks for disease detection and ten laboratory trucks for sick animal care.

Poultry facilities will include a production complex for chicks and incubator eggs, two slaughterhouses and processing plants, three egg production centers and two breeding and production centers for meat chickens. The Ministry also visualizes establishment of three animal feed plants.

Plans also call for establishment of three cold storage depots for fruits and vegetables, a dozen refrigeration trucks and three potato stocking centers.

Facilities planned for agricultural machinery maintenance include 180 repair shops as well as trucks and related equipment for mobile workshops.

Interested American suppliers, service organizations and other would-be participants can obtain a more detailed description of the Algerian plans from the Office of International Investment, BIC-878, U.S. Department of Commerce, Washington, D.C. 20230.

1321—AUSTRALIA—Group of Japanese trading companies currently negotiating with U.S. firm regarding participation in proposed Australian **liquefied natural gas project**. Group hopes to develop sufficient quantities of gas for exportation to Japan. Would involve construction of gas liquefication plants, pipelines. Japanese welcome expressions of interest by American suppliers of construction and engineering services and equipment. Write: Isao Hayashida, Chief, Petroleum Section, Okura Trading Co., Ltd., 2-3-6 Ginza, Chuo-ku, Tokyo, Japan. P-71700

2649—AUSTRALIA—Affiliate of large Australian import/export organization seeks to manufacture under license or joint venture **office stationery, utility, gift and novelty items**. Firm reports sales contacts with wholesalers of office and school supplies, news agents, jewelers, chain stores, gift and souvenir houses. Presently operating metalworking and plastic molding plant. Write: A. R. Hill, Biro Bic & Gollin Pty. Ltd., Popes Road, Noble Park, Victoria 3174, Australia. WTD. P-71698

2800, 3400—ENGLAND—Major British producer with expertise in chemical processing technology, production of precision ceramics, high grade precision welding, graphite machining and bearing technology seeks licenses for products allied to the **chemical and metalworking industries**. Company interested in contacting U.S. firms who may have new inventions, new products or existing products which they would like to have marketed overseas. Firm maintains sales network calling on industrial consumers, utilities and government departments throughout the world. Employs 9,000 and has annual sales of $150 million. Inquiries will be forwarded to British concern for reply. Write: Office of International Investment, BIC-878, U.S. Department of Commerce, Washington, D.C. 20230. P-71705

2911—SPAIN—Spanish Government corporation accepting proposals for 40% equity in proposed **new petroleum refinery** at Tarragona. Government will retain 60%. Bidders required to present proposals prior to Feb. 29, conform to standard provisions of administrative law, post 15 million peseta bond, and make bid for entire 40% participation. Refinery capacity planned for seven million m.t. annually; estimated cost $300 million. Articles of incorporation and statutes of new corporation, preliminary feasibility study, process description, investment projects and plant site layout available for consultation in Ministry of Industry, Madrid. P-71702

3079 — JAPAN — Manufacturing rights for **pollution control equipment** made of fiberglass reinforced plastics. Product interests include stacks, ducts, scrubbers, gas coolers, tanks, cooling towers, smoke exhaust and desulfurization equipment. Firm presently produces phenolic laminated plastics, monomer cast nylon products and other materials. Makes structural foam products under American license. Operates two plants, has several subsidiary sales companies and employees 600. Background information on proposal is available from the Office of International Investment, BIC-878, U.S. Department of Commerce, Washington, D.C. 20230. Write: Starlite Industry Co. Ltd., Tenroku Hankyu Bldg., 5, 6-chome, Tenjinbashi-suii, Oyodu-ku, Osaka, Japan. WTD P-71689

3079—UNITED KINGDOM—Firm seeks licenses to produce injection molded and thermoformed plastic components such as **cable straps, fasteners, clips, cleats and rivets**. Of particular interest are connectors for auto, electronic, radio and television industries. Presently manufactures products for these industries and for appliance, furniture, packaging and pyrotechnics industries. Employs 300 with sales outlets in France and Germany. Product brochure available from Office of International Investment, BIC-878, U.S. Department of Commerce, Washington, D.C. 20230. Write: Alan G. Raggett, Director, ENALON Plastics Ltd., Drayton Rd., Tonbridge, Kent, England. WTD. P-71703

3400—CANADA—Major U.S. corporation has manufacturing facilities and know-how to produce **durable goods** in Canadian subsidiary under subcontract or licensing agreement. Facilities include complete machine shop, welders, presses with capacity of up to 150 tons, quality fiberglass and painting, and 70,000 sq. ft. assembly line area. Write: Alexander Kalbouss, Bangor Punta Operations, Inc., One Greenwich Plaza, Greenwich, Conn. 06830. P-71694

3541—ITALY—Manufacturer of **milling machines** seeks U.S. buyer. Company produces about 40 machines a month, employs 130 and operates 60,000 sq. ft. facility. Half of current production is exported, primarily to Europe, Australia and South Africa. Write: Metalsider, Via Broli, Noventa Vicentina (Vicenza). P-71699

3569—FRANCE—Large firm seeks license to manufacture **filters utilizing polypropylene woven fiber**. Presently manufactures wire products, communication equipment and aeronautical and navigational instruments. Employs approximately 1,100. Write: P. Felix, Production Dept. Mgr., Tissmetal Lionel-Dupont S.A., 20 rue de la Claire, 69-Lyon 9, France. WTD. P-71704

3599, 3622—CANADA—Producer of fluid power machinery and electrical control panels seeks licenses for **hydraulic and pneumatic control systems and industrial electric and electronic controls and accessories**. Firm's sales include marketing of industrial power tools, hydraulic and pneumatic components, power transmission products, pumps and electric controls. Write: A. W. Baxter, President, Industrial Systems Ltd., P.O. Box 602, Darmouth, Nova Scotia. WTD. P-71696

3612—ENGLAND—Established producer of telecommunications equipment, transformers and reed relays seeks manufacturing license to produce **voltage stabilizing transformers (VST) (ferro resonant transformers)**. Firm manufactures about 30,000 relatively expensive luxury line of VST's annually, but is willing to negotiate licensing agreement for smaller, more compact, less expensive VST's. Formed in 1948, firm employs over 200 and has five salesmen marketing products throughout Europe. Write: B. J. Beales, Astralux Dynamics Ltd., Red Barn Road, Brightlingsea, Colchester, Essex, CO7 OSW, England. WTD. P-71701

3630—BELGIUM—Licenses sought by important manufacturer of **electric stoves, ranges, refrigerators, washing machines and dryers** for production of equipment in same fields. Usines et Fonderies Nestor Martin S.A., c/o J. Chevalier, Secretary General, 52 rue Nestor Martin, 1080 Brussels. WTD. P-71690

3811—ISRAEL—Licenses and technical know-how sought by Tel Aviv firm to manufacture **aircraft instruments**. Firm plans on establishing assembly plant for this purpose and performing major overhauls and modifications on jet passenger airplanes. No financing involved, but purchase of special tools a possibility. Write: Istelco Ltd., P.O. Box 3159, Tel Aviv. WTD. P-71688

3940—NETHERLANDS—Major **toy distributor** with 1,270 accounts, including 70 department stores, available for acquisition. Dutch distributing subsidiary of British parent has 20,000 sq. ft. storage showroom and office facilities located in Amsterdam-Schiphol airport area. Sales and distribution network and customer lists would be included. Write: F. Bauling, Managing Director, Lines Bros. (Holland) N. V., Bloemendalerweg 43, Weesp, Netherlands, or P. F. M. Shewell, Cooper Bros., Abacus House, Gutter Lane, Cheapside, London, England. WTD. P-71695

4231—THAILAND—Joint venture or complete ownership proposals sought for establishment of three major **motor freight terminals** on selected locations on outskirts of Bangkok. Each proposed terminal to feature loading and unloading facilities, warehouses, gas stations, automotive servicing garages, bank facilities, small hotels and shopping centers. Plans call for each terminal to be a new community covering 100 or more acres. Write: Pichai Nopakoon, Chief, Marketing Division, Express Transportation Org., Sri Ayudhya Rd., Bangkok. P-71691

7011—GREECE—Firm seeks **management partner** for 800-bed luxury hotel it has contracted to build at Faleron Delta near Athens. Construction of the proposed hotel, which may later be enlarged to 1,200 beds, is scheduled to begin in March 1973 with completion by end of 1974. No financial participation required. Additional information available from the Office of International Investment, BIC-878, U.S. Department of Commerce, Washington, D.C. 20230. Hellinki Techniki, S.A., 54 Amalias St., Athens. P-71419

7392 — SWITZERLAND — American-oriented **business service organization offers services for U.S. licensors**, including direct registration, arrangements for legal counsel, booking arrangements, contract negotiations and monitoring services on continuing basis. Col. Gordon H. West, R & R Associates S.A., 30 rue des Vollandes, 1207 Geneva. P-71692

Licensing In U.S.

For additional information on opportunities to manufacture foreign firm's products in the U.S., write Commerce's Office of International Investment, BIC-874, Bureau of International Commerce, Department of Commerce, Washington, D.C. 20230 (202-967-2248), referring to the appropriate **File** *number assigned each opportunity listed below.*

AUSTRIA—Firm that markets patents would like to sell or license the following inventions: **folding machine for strip-shaped textile materials** such as stockings; **target practice device** for triangular aiming of rifles; **newspaper vending machine**, adjustable for all dailies, weeklies and magazines. **File 2117**

CANADA—An established Canadian company manufacturing power humidifiers offers their **humidifiers** for manufacturing under licenses in the U.S. No humidistat is required and the humidifier can be adjusted to the individual's needs. **File 2118**

UNITED KINGDOM—An established English company manufacturing **forklift trucks and side loaders** is interested in having its equipment manufactured under license in the United States. **File 2119**

GERMANY—An established German firm specializing in the production of conveyor systems and equipment wishes to license an American firm to make their heavy duty powered accumulation roller conveyors and accessories, suitable for conveying of cartons and pallets. Advantages claimed by the company include: extremely safe transportation of loaded goods, almost noiseless jolt-free operation; low pressure accumulation and long operational life. **File 2120**

GERMANY — A well-known manufacturer of knitting machines, screws, and nuts wishes to make manufacturing arrangements under license for their **cylindrical locking rings** made of steel and synthetic materials. The rings are used for locking pulleys, spur gears, bevel gears, sprocket wheels, worm gears, couplings, cams, and similar items. Also as adjustable connecting links for scale discs, hand-wheels and cranks, and as fastening elements for attachments to machine tools, chucks, mandrels, millers, and drills. **File 2121**

NETHERLANDS—Reputable Dutch firm offers a joint venture partnership or licensing arrangement with an American firm to make their patented **chain cutter for industrial sewing machines** and their **universal stacker for industrial sewing** operations. The manufacturer states the unique design permits attachment to existing sewing machines quickly and eliminates the normal thread cutting procedure, thus saving considerable time. The product is presently sold in Germany, Belgium and Japan. **File 2122**

ITALY—A firm that exports technological expertise offers licensing arrangements on **dyes, pesticides, additives for plastics and resins** such as stabilizers and plasticizers plus additives for textiles and fabric finishing chemicals to American firms. **File 2123**

SWITZERLAND—An important supplier to the Swiss watch industry of parts for the newly developed plastic watches offers licenses for high precision parts for the watch and electronics industries. Reportedly, large amounts of company funds are invested in research and development. **File 2124**

SWITZERLAND—Firm offers licensing arrangements for their **patented assembly line construction system** that they claim differs entirely from traditional prefabrication. With their system, multi-unit dwellings, offices, schools, hospitals, homes, or vacation and weekend cottages are fabricated on the assembly line like automobiles. The system results in a very low investment requirement of only 20 percent of competitive systems and a return on the investment of 100 percent in 8 to 12 months following start up of plant, according to the manufacturer. **File 1878-R**

Austrian Consultant Seeks To Aid U.S. Firms In Yugoslavia

Engineer Kurt Milowiz, who operates a civil engineering office in Graz, Province of Styria, Austria, expressed a serious interest at the recent Vienna International Trade Fair in assisting U.S. firms desiring to enter the Yugoslav market.

Milowiz offers engineering consultant services, including the supervision of project implementation and final delivery of completed plants on behalf of American clients. He specializes in engineering projects concerning air purification, water treatment, chemical manufacturing, mining, and construction, as well as electronic data processing and process control. Interested firms should contact Milowiz at Quellen Gasse 58, A-8010 Graz, Styria, Austria. WTD 11/71.

Australia To Build Railroad, Seeks Construction Bids

The Western Australian Government Railway issued a tender on Dec. 11 for construction of a standard gauge railway consisting of 53 miles of main line plus 7 miles of spur and siding from Kalgoorlie through Kambalda to Lake Lefroy. The cost is estimated at approximately $5.7 to $7.9 million. Work is expected to start in June and be completed by June 1973. The tender will have an option allowing a firm to bid only on track work or earth work, if so desired.

Bid deadline is Feb. 15.

Interested firms should contact A. B. Hol, Chief Civil Engineer, Western Australian Government Railway, 605 Wellington St., Perth, Western Australia. Additional bid information is being sent by the American Consulate in Perth to the Construction, Water Resources and Engineering Division, BDC-742, U.S. Dept. of Commerce, Washington, D.C. 20230.

Foreign Trade Opportunities

These trade opportunities are based on reports received from the U.S. Foreign Service by the Business Opportunities Staff and other units of the Bureau of Domestic Commerce (BDC), U.S. Department of Commerce, Washington, D.C. 20230. The commodities in which foreign firms have interest are indicated by the five-digit numbers and commodity classifications which are from the Standard Industrial Classification (SIC) Manual and the Numerical List of Manufactured Products, 1967 Census of Manufacturers, used extensively by Government and industry.

U.S. firms should be aware that the listing in Commerce Today *of opportunities to trade in specific commodities and technical data does not necessarily imply approval of their export by the Department of Commerce pursuant to the Export Administration Act of 1969. Applicable export licensing regulations must be followed.*

Every effort is made to include only firms or individuals with good reputations. However, the Department cannot be responsible for any trade relations.

The mark (●) indicates that this trade opportunity is a request for bids by a foreign government agency. A (★) at the end means that additional information may be borrowed by U.S. firms from the individual division of BDC. To avoid delays, requests for loan material should specify the country, commodity and foreign government agency.

WTD indicates that a World Trade Directory Report containing financial and business background information on the foreign firm is available for $2 from the U.S. Department of Commerce, BIC-924, Washington, D.C. 20230.

Direct Sales

Specific foreign firms have expressed interest in direct purchases of the products below. See also the "Agencies" listing.

Small arms ammunition

19610—GERMANY—Cartridges for Distress—signal pistol. Pyrotechnische Fabrik, Attn: Carl Flemming (importer, dist., mfr.), 2059 Hornbek, Kreis Herzogtum Lauenburg. WTD in prep.

Ordnance, accessories

19990 — GERMANY — Line throwing guns (for seaships); Distress—signal pistols. Pyrotechnische Fabrik, Attn: Carl Flemming (importer, dist., mfr.), 2059 Hornbek, Kreis Herzogtum Lauenburg. WTD in prep.

Confectionery

20711—GERMANY—Candy, all types. Alfred Vest & Co. (importer), 2 Hamburg 1, Holzdamm 53. WTD 11/71.

20712—GERMANY—Candy, five and ten cent specialties. Alfred Vest & Co. (importer), 2 Hamburg 1, Holzdamm 53. WTD 11/71.

20722—GERMANY — Candy bars, all types made from cocoa beans, incl. chocolate bars. Alfred Vest & Co. (importer), 2 Hamburg 1, Holzdamm 53. WTD 11/71.

Floor covering mills, products

22720—GERMANY—Tufted carpets, nylon TD 1050 x 3 Allyn 707, or equal. Prices c.i.f. European ports. Reichel, Herbert, Textilwerke (dist., mfr., exporter), 4134 Rheinberg/Rhld. WTD 10/71.

Yarn, thread mills, products

22813—FRANCE — Polypropylene continuous multi-yarns (200 to 1,000 deniers); polypropylene horse hair (0.10 to 0.60 millimeters); polypropylene fiber (types: 10.1, 10.3, 12.2, 12.3, 28.2, 28.3). Tissmétal Lionel-Dupont (importer, dist., mfr.), 20 rue de la Claire, 69-Lyon 9. WTD 9/71.

22814—GERMANY—Nylon yarns, TD 3150 Allyn 707, or equal, in the gray and space dyed. Prices c.i.f. European ports. Reichel, Herbert, Textilwerke (dist., mfr., exporter), 4134 Rheinberg/Rhld. WTD 10/71.

22822—ISRAEL—Viscose rayon yarn: 120, 150, 300, 450 and 600 deniers, on cones; second choice. Elie Danon Ltd. (importer, dist./wholesale), 16 Herzl St., P.O. Box 1809, Tel Aviv. Cable address: LIDAN TELAVIV. WTD in prep.

Men's, Boys' furnishings

23291—DENMARK — Outerwear coats (parka coats) for use in Arctic areas. Grønlands Indkøbsring A/S (importer, agent, wholesaler), 28-B H. C. Ørstedsvej, DK-1879 Copenhagen V. WTD 11/71.

Millwork, veneer, prefabricated structural wood products, plywood

24330—GERMANY—Sauna rooms, prefabricated wood. Organisation Kollmann GmbH & Co. KG., Attn: Mr. Kollmann (importer, dist.), 5841 Suemmern, Postfach 28. WTD 11/71.

Paper mills, products

26210—GERMANY—Any type of printing paper—newsprint, printing and converting paper, book paper. Hans Mohrhagen K.C. (importer, dist.), 63 Rotebuehlstrasse, 7 Stuttgart 1. WTD 10/71.

26210 — SINGAPORE — Good-quality papers for making toilet tissues, facial tissues, napkins, paper bags, paper cups, paper drinking straws, paper strings, and bread wrappers. Mr. Lee Tian Yew, Mng. Dir., Singapore Paper Products Ltd. (importer, mfr.), 315 Alexandra Rd., Singapore 3. WTD 11/71.

26211 — SINGAPORE — Newsprint cull rolls. Mr. Tan Eng Sing, Mng. Dir., United Pulp & Paper Co., Ltd. (importer, dist., mfr.), Lot 7-D Liu Fang Rd., Jurong Town, Singapore 22. WTD 11/71.

26217—SINGAPORE—Sack kraft. Mr. Tan Eng Sing, Mng. Dir., United Pulp & Paper Co., Ltd. (importer, dist., mfr.), Lot 7-D Liu Fang Rd., Jurong Town, Singapore 22. WTD 11/71.

26314—SINGAPORE—Liner board. Mr. Tan Eng Sing, Mng. Dir., United Pulp & Paper Co., Ltd. (importer, dist., mfr.), Lot 7-D Liu Fang Rd., Jurong Town, Singapore 22. WTD 11/71.

26315—GERMANY — Cardboard. Hans Mohrhagen K.G. (importer, dist.), 63 Rotebuehlstr. 7 Stuttgart 1. WTD 10/71.

Converted paper, paperboard items

26410—ISRAEL—Paper, coated one side (including chromocoated); gummed paper suitable for labels, other uses; paper for bible printing; paper suitable for stamps (photogravure); chip boards;—all in large or small rolls, or sheets (stocklots). Nesim Cordova (importer, dist./wholesale, agent), P.O. Box 1440, Tel Aviv, 61000. WTD in prep.

Industrial chemicals

● **28100—CEYLON**—Supply of dyes, and auxiliary chemicals, 52 in all, in varying quantities and size containers. Tender No. COM/TEN/71/54, bid deadline February 14. The Chairman, Tender Board, Department of Small Industries, Hemas Building, Bristol Street, Colombo 1. Tender with specifications available from the Embassy of Ceylon, 2148 Wyoming Ave., NW., Washington, D.C. 20008. (★202-483-4025). "A *review* copy will also be available at the Department of Commerce Field Office, 11444 Federal Building, 450 Golden Gate Ave., San Francisco, Calif. 94102 (★415-556-5868)."

● **28100—CEYLON** — Supply of textile dyes and auxiliary chemicals, 31 in all, in varying quantities and size containers. Tender No. COM/TEN/71/53, bid deadline January 16. The Chairman, Tender Board, Ministry of Industries and Scientific Affairs, 48, Sri Jinaratna Rd., Colombo 2. Tender with specifications available from Embassy of Ceylon, 2148 Wyoming Ave., NW., Washington, D.C. 20008 (★202-483-4025). "A *review* copy will be available at the Department of Commerce Field Office, 11444 Federal Bldg., 450 Golden Gate Ave., San Francisco, Calif. 94102 (★415-556-5868)."

Industrial chemicals

28151—INDIA—Meta-para cresols having 40-42 percent meta cresol, 30-32 percent para cresol and less than 3 percent ortho cresol; boiling range of mixtures should be about 200-202° centigrade.

Sheth Phostroxide Mfr'g Co., Attn: A. R. Sheth (mfr.), 4 Khanderao Colony, R.V. Desai Rd., Baroda 1. WTD 11/71.

28153 — GERMANY — Synthetic organic pigments. Prices c.i.f. European ports. Priem & Co., Wilhelm (importer, dist., agent), 35 Kreuzstr., 48 Bielefeld. WTD 10/71.

28160 — SINGAPORE — Inorganic pigment. Mr. K. Fukatsu, Mgr., Interchem-Toyo (S.E.A.) Ltd. (importer, agent, retailer), 8 Fan Yoong Rd., Jurong Town, Singapore 22. WTD 11/71.

28161—GERMANY—Titanium pigments. Prices c.i.f. European ports. Priem & Co., Wilhelm (importer, dist., agent), 35 Kreuzstr., 48 Bielefeld. WTD 10/71.

28180—GERMANY—All types of industrial organic chemicals. Prices c.i.f. European ports. Brenntag GmbH (importer, dist., exporter), 21-25 Reichspraesidentenstr., 433 Muelheim/Ruhr. WTD 10/71.

28183—JAPAN—Synthetic oleyl alcohol or substitute chemicals having similar quality to oleyl alcohol, 1-2 metric tons a mo. Horii & Co., Ltd. Masao Matsumura, Chief of Trade Dept. (importer, dist., mfr.), 2 Kanda-Kajicho 2-chome, Chioyda-ku, Tokyo. WTD in prep.

28185—SOUTH AFRICA—Malic acid, citric acid, other chemicals for food, beverage processing. Columbit (Pty.) Ltd. (importer, dist., mfr.), P.O. Box 2737, Cape Town, C.P. WTD 11/70.

28190—GERMANY—All types of industrial inorganic chemicals. Prices c.i.f. European ports. Brenntag GmbH (importer, dist., exporter), 21-25 Reichspraesidentenstr., 433 Muelheim/Ruhr. WTD 10/71.

28190 — NIGERIA — Wide variety of chemicals. Complete list and quantities available from International Business Opportunities Staff, BDC-584, Rm. 4813, U.S. Dept. of Commerce, Washington, D.C. 20230. Odutola Tyresoles (importer, mfr.), Adeola Odutola St., P.O. Box 419, Ibadan, Western State. WTD 10/71.

Synthetic materials

28213 — GERMANY — Thermoplastic resins. Prices c.i.f. European ports. Priem & Co., Wilhelm (importer, dist., agent), 35 Kreuzstr., 48 Bielefeld. WTD 10/71.

28214—GERMANY—Granulates for expandable polystyrene. Alfred Augsburg (importer, mfr.), 1-13 Auf dem Kamp, P.O. Box 1224, 286 Osterholz-Scharmbeck. WTD 11/71.

28214—GERMANY—Thermosetting resins. Prices c.i.f. European ports. Priem & Co., Wilhelm (importer, dist., agent), 35 Kreuzstr., 48 Bielefeld. WTD 10/71.

28216 — SINGAPORE — Synthetic resin for printing ink. Mr. K. Fukatsu, Mgr., Interchem-Toyo (S.E.A.) Ltd. (importer, agent, retailer), 8 Fan Yoong Rd., Jurong Town, Singapore 22. WTD 11/71.

28216 — IRAN — Resins for protective coatings. Niknafs & Co. (importer, dist.), Bouzarjomehri Ave., Saray Nikpour, P.O. Box 1216, Tehran. WTD 11/71.

Drugs

28331—FINLAND—In bulk: alkaloids and salts, uncompounded antibiotics, barbituric acid and derivatives, caffeine and derivatives, hormones and derivatives, sulfa drugs, uncompounded synthetic vitamins. Bang & Co Oy, Attn: Aulis Tinnilä, Dir. (importer, dist., agent), Chemical Dept., P.O. Box 10079, Helsinki 10. WTD 11/71.

28332—FINLAND—In bulk: anesthetics, atropine and derivatives, refined carrageenin, cinchona and derivatives, cocaine and derivatives, codeine and derivatives, ergot alkaloids, fish liver oils, refined and concentrated for medicinal use, uncompounded insulin, natural menthol and derivatives, vegetable gelatin (agar-agar), uncompounded natural vitamins. Bang & Co. Oy, Attn: Aulis Tinnilä, Dir. (importer, dist., agent), Chemical Dept., P.O. Box 10079, Helsinki 10. WTD 11/71.

Special Action

Each of the following trade notices is deemed to rate the special attention of American manufacturers and suppliers by the U.S. Commercial Officers overseas.

12112—MEXICO—Bituminous coal (lump coal) which burns with long flame having following approximate chemical analysis: fixed carbon 56-58%; volatiles 36-38%; ash 4-8%; 1,000 tons per yr., minimum. Proveedora Industrial Mosa, S.A., Attn: Ing. Luis O. Montemayor, Gen. Mgr. (importer, dist.), Avenida Tecnologico 351, Monterrey, N.L. WTD in prep.

32970—MEXICO—Graphite and silicon carbide crucibles 15 to 30 per mo. used for smelting of nonferrous alloy metals, used in manufacture of locks, bearings, rods, screws, bolts, nuts. Proveedora Industrial Mosa, S.A., Attn: Ing. Luis O. Montemayor, Gen. Mgr. (importer, dist., agent), Avenida Technologico 351, Monterrey, N.L. WTD in prep.

33121—MEXICO—1000 short tons per mo. of industrial coke of type used by steel mills, foundries. Proveedora Industrial Mosa, S.A. (importer, dist., agent), Avenida Tecnológico 351, Monterrey, N.L. WTD in prep.

38410 — ITALY — "Olvson" type plastic surgical needles. Direct purchase or agency. M.A.S., Medicazione Articoli Sanitari (importer, dist., agent), Viale Regina Margherita 156, 00198 Rome. WTD 1/71.

28332—GERMANY—Organic and inorganic medicinal chemicals. Prices c.i.f. European Ports. Brenntag GmbH (importer, dist., exporter), 21-25 Reichspraesidentenstr., 433 Muelheim/Ruhr. WTD 10/71.

28332—GERMANY—Organic, inorganic medicinal chemicals. Prices c.i.f. European ports. Priem & Co., Wilhelm (importer, dist., agent), 35 Kreuzstr., 48 Bielefeld. WTD 10/71.

Gum, wood chemicals

28611—SOUTH AFRICA—Bleaching, deodorizing charcoal for wine industry. Columbit (Pty.) Ltd. (importer, dist., mfr.), P.O. Box 2737, Cape Town, C.P. WTD 11/70.

Chemical products

28993—GERMANY — Pyrotechnic articles: distress signals, distress signal rockets, handflares, orange smoke signals, light and light smoke combination for lifebuoys, man overboard-signals. Pyrotechnische Fabrik, Attn: Carl Flemming (importer, dist., mfr.), 2059 Hornbek, Kreis Herzogtum Lauenburg. WTD in prep.

Petroleum refining

29110—SPAIN — 50 tons white crude scale wax, 52/54°C, 1% oil content, in sacks of 50 kilos, net. Quotations c.i.f. Santa Cruz de Tenerife (Canary Islands). Deliveries to be made no later than February 1972. No special labeling required. Correspondence requested in Spanish. Eugenio Machado & Cia., S.L. (importer, dist.), Apartado Postal #166, Santa Cruz de Tenerife. Cable address: EMCIA. WTD in prep.

Plastic products

30792 — GERMANY — Foamed plastics products. Prices c.i.f. European ports. Priem & Co., Wilhelm (importer, dist., agent), 35 Kreuzstr., 48 Bielefeld. WTD 10/71.

Glass, glassware

32293—NETHERLANDS — Glass fiber products for pipe lining in chemical industry. Groneman N.V., Attn: J.G.E. Groneman (importer), 67 Parallelweg SS, Hengelo. WTD in prep.

32294 — NETHERLANDS — Technical glassware for chemical industry. Groneman N.V., Attn: J.G.E. Groneman (importer), 67 Parallelweg SS, Hengelo. WTD in prep.

Pottery, related products

32690—JAPAN—Ceramic products for electric, electronic devices, resistors, heating elements, appliances, other technical applications. Requests prices f.o.b. U.S. ports or c.i.f. Nagoya. Kasuga Inc. (importer, dist.), P.O. Box No. 72, Higashi, Nagoya, WTD 4/71.

Steel mill products

33121—GERMANY — Ferroalloys made in blast furnaces, all types, including: ferrochromium, ferrosilicon, ferromanganese, ferrovanadium, ferrotungsten, ferromolybdenum, ferrotitanium, ferrophosphorus, siliconmanganese. Maher & Co. GmbH. (importer, dist., agent), 11 Auf dem Stein, 5805 Breckerfeld-Dahl. WTD 8/71.

33128—ICELAND—Rolled steel products such as bars & plate; steel beams; other steel products for construction purposes. SINDRA Stal h.f., Attn: Mr. Einar Asmundsson (importer, dist., mfr), Hverfisgata 42, P.O. Box 739, Reykjavik. WTD in prep.

Rolling, drawing, extruding of nonferrous metals

- 33500—INDIA—Supply of composite cables containing 2,300 KM. 4 coaxial cores of type 375 & 174. Tender No. ES-9/202/39/098 cell-1206. Bid deadline January 28. Contact Directorate General, Supplies and Disposals, Jeevantora Bldg., Parliament St., New Delhi, India. Tender document available from India Supply Mission, 2536 Massachusetts Ave., N.W., Washington, D.C. 20008
- 33500—SINGAPORE—Supply of paper insulated distribution type cables. Tender No. P1/34/71. Bid deadline February 4. Contact General Manager,

Singapore, Telephone Board, Telephone House, Hill St., Singapore 6, Republic of Singapore. Copies of tender available on a loan basis from the Copper Program, BDC, Washington, D.C. 20230. ★(202-967-4718).

● **33500—SINGAPORE**—Supply of cellular insulated, unit twin type, polythene cables. Tender No. P1/35/71. Bid deadline February 4. Contact General Manager, Singapore Telephone Board, Telephone House, Hill St., Singapore. Copies of tender available on a loan basis to U.S. firms from the Copper Program, BDC-784, Washington, D.C. 20230. ★(202-967-4718).

● **33500—SINGAPORE**—Supply of paper insulated quad trunk (PCQT) type telephone cables, a) 0.63 MM dia., 1040 pairs, estimated quantity: 85,000 meters. Tender No. P1/33/71. Bid deadline February 4. Contact General Manager, Singapore Telephone Board, Telephone House, Hill St., Singapore 6, Republic of Singapore. Copies of tender available on a loan basis to U.S. firms from the Copper Program, BDC-784, Washington, D.C. 20230. ★(202-967-4718).

● **33500—SINGAPORE**—Supply of twin type fully-filled polythene cables. Bid deadline February 4. Tender No. P1/36/71. Contact General Manager, Singapore, Telephone Board, Telephone House, Hill St., Singapore 6, Republic of Singapore. Copies of tender available on a loan basis to U.S. firms from the Copper Program, BDC-784, Washington, D.C. 20230. ★(202-967-4718).

33572—IRAN — Electrical cables, wires of various sizes. Gulf Supply, Mostafa Haghayegh & Bros. (importer, dist., agent), Pahlavi Ave., P.O. Box 33, Abadan. WTD 10/71.

Primary metal industries

33911—GERMANY—Steel forgings for crankshafts. Hirth Motoren K. G. (mfr.), Bahnhofstrasse, D-7141 Benningen a.N. WTD 11/71.

Cutlery, hand tools, general hardware

34230—SWITZERLAND — Contractors' special hand tools, new inventions. Correspondence requested in German. Jak. G. Anderhub, MAWERK (importer, dist.), Seestrasse 355, P.O.B. 124, 8038 Zurich. WTD 11/71.

34231—IRAN — Hand tools for use in petroleum, petrochemical industries, e.g. wrenches, pliers. Gulf Supply, Mostafa Haghayegh & Bros. (importer, dist., agent), Pahlavi Ave., P.O. Box 33, Abadan. WTD 10/71.

34294—GUATEMALA—Furniture hardware, including door lock sets. Correspondence requested in Spanish. La Vidrieria Moderna—Karl E. Albrand Cía. Ltda. (importer, dist., agent), 11 Avenida 21-16, Zona 1, Apartado Postal 382, Guatemala City. WTD 12/71.

Heating apparatus, plumbing fixtures

34330—ITALY—Food waste and solid garbage incinerators with 100 to 150 metric ton daily incinerating capacity for community of 14 small towns with population of 20,000 persons. Amministrazione Provinciale di Torino, Assessorato allo Sviluppo Economico, Attn: Dr. Giuseppe Demichela.

34330 — GERMANY — Electric heating boilers for central heating. Organisation Kollmann GmbH & Co. KG., Attn: Mr. Kollmann (importer, dist.), 5841 Suemmern, Postfach 28. WTD 11/71.

34336—NETHERLANDS—Heating units for households, large buildings. Machinefabriek de Bruijn N.V.; Attn: Mr. T. Kelderman (importer, mfr.), 70 Oldenzaalsestraat, P.O. Box 92, Enschede. WTD in prep.

Fabricated structural metal products

34422—GUATEMALA—Aluminum window molding, trim. Correspondence requested in Spanish. La Vidrieria Moderna—Karl E. Albrand Cía. Ltda. (importer, dist., agent), 11 Avenida 21-16, Zona 1, Apartado Postal 382, Guatemala City. WTD 12/71.

Screw machine products

34521—IRAN—High tensile nuts, bolts, washers. Gulf Supply, Mostafa Haghayegh & Bros. (importer, dist., agent), Pahlavi Ave., P.O. Box 33, Abadan. WTD 10/71.

Fabricated wire products

34811—IRAN—Wire rope of various sizes. Gulf Supply, Mostafa Haghayegh & Bros. (importer, dist., agent), Pahlavi Ave., P.O. Box 33, Abadan. WTD 10/71.

Fabricated metal products

34941—NETHERLANDS—Metal valves for piping systems in chemical plants. Groneman N.V., Attn: J. G. E. Groneman (importer), 67 Parallelweg SS, Hengelo. WTD in prep.

34941—THAILAND — Valves, bronze, various sizes for use in factory construction. Requests catalogs, c.i.f. Bangkok prices. Eastern Chemical Co., Ltd. (mfr.), 421 Mahaprutaram Rd., Bangkok. WTD in prep.

34942 — NETHERLANDS — Hydraulic valves, other hydraulic equipment. Rosier-Rosam N.V. (importer, dist.), 20 Textielweg, Amersfoort. WTD 3/71.

34943—IRAN—Valves for use in petroleum, petrochemical industries. Gulf Supply, Mostafa Haghayegh & Bros. (importer, dist., agent), Pahlavi Ave., P.O. Box 33, Abadan. WTD 10/71.

34980—IRAN—Carbon steel and milled steel pipes and fittings; heavy duty, high pressure. Gulf Supply, Mostafa Haghayegh & Bros. (importer, dist., agent), Pahlavi Ave., P.O. Box 33, Abadan. WTD 10/71.

Engines, turbines

● **35100—ETHIOPIA**—Supply eight automatic standby diesel engine generators, one at 300 KVA, one at 100 KVA and four at 50 KVA; 220/380 V, 3-phase, with control panels and automatic control units to be installed at elevations up to 7,000 feet above sea level. Spare parts for three years to be included and complete standard service and overhaul of tools, including injector testing outfit. Tender No. 20/71, bid deadline January 12. Imperial Board of Telecommunications of Ethiopia, P.O. Box 1047, Addis Ababa. Specifications available on short-term loan basis to firms domiciled in U.S. from Power and Electrical Equipment Program, BDC-776, U.S. Department of Commerce, Washington, D.C. 20230. ★(202-967-5585).

● **35100—TUNISIA**—Supply and install 40 MW power plant equipped with industrial gas powered turbines. (STEG) Societe Tunisienne De. L'Electricite et Du Gas, 38 Rue Demal Ataturk, Tunis. Tender documents available January 1972, bid deadline March 31. Documents available from Societe, at $100 per copy. Expected IBRD and Kuwaiti Fund financing.

Farm machinery

35227—ITALY—Lawn mowers, all types. Omnia-Motor di Alberto Da Prada (importer, dist., agent), Via Cividale del Friuli 6, 00183 Rome. WTD 11/71.

35228—ITALY—Garden tractors from 5 up to 8 HP; edge trimmers, shears. Omnia-Motor di Alberto Da Prada (importer, dist., agent), Via Cividale del Friuli 6, 00183 Rome. WTD 11/71.

Construction, mining, materials handling machinery, equipment

35316—SWITZERLAND — Gasoline engine driven concrete vibrators, air driven vibrators, aggregate spreaders, soil stabilization pavers. Correspondence requested in German. Jak. G. Anderhub, MAWERK (importer, dist.), Seestrasse 355, P.O.B. 124, 8038 Zurich. WTD 11/71.

35317—SWITZERLAND — Wheel type tractor-shovel loaders. Correspondence requested in German. Jak. G. Anderhub, MAWERK (importer, dist.), Seestrasse 355, P.O.B. 124, 8038 Zurich. WTD 11/71.

35318 — SWITZERLAND — Motor graders, front-end loaders. Correspondence requested in German. Jak. G. Anderhub, MAWERK (importer, dist.), Seestrasse 355, P.O.B. 124, 8038 Zurich. WTD 11/71.

35319 — NETHERLANDS — Hydraulic winches, similar hydraulic equipment. Rosier-Rosam N.V. (importer, dist.), 20 Textielweg, Amersfoort. WTD 3/71.

35319 — SWITZERLAND — Self-propelled ditchers, trenchers, wearing parts for earthmoving machines, contractors' hand held air tools, drilling hammers, saws, new inventions. Correspondence requested in German. Jak. G. Anderhub, MAWERK (importer, dist.), Seestrasse 355, P.O.B. 124, 8038 Zurich. WTD 11/71.

35350—PHILIPPINES—Drives & conveyors, packaged deal, all sizes for all applications. Rencrofts Industrial Supplies Corp., Attn: R. S. Kalaw (importer, dist.), 9453 Baticulin St., Makati, Rizal. WTD in prep.

Metalworking machinery

35415—ARGENTINA—Lathes for machining valve seats, finishing internal walls of cylinders of small (2 to 16 HP), stationary, internal combustion engines. Villa Hermanos y Cia. (mfr.), Av. San Martín 150, 9 de Julio, Provincia de Buenos Aires. WTD in prep.

35419—IRAN—Metal working equipment including grinding machines, cutting torches. Gulf Supply, Mostafa Haghayegh & Bros. (importer, dist., agent), Pahlavi Ave., P.O. Box 33, Abadan. WTD 10/71.

35421 — EL SALVADOR — One metal sheet-plate bending machine operated by electric motor with capacity for bending metal sheet-plate of one half ($\frac{1}{2}$) to one (1) in. thick and eight (8) ft. wide, for making water (other liquids) storage tanks. Correspondence requested in Spanish. Mr. Alfredo Trujillo, Departamento Comercial—COMSA (mfr.), Blvd. Venezuela 3057 (Apt. Postal 937), San Salvador. WTD 9/71.

35422—MEXICO—Sheet metal working press (preferably semi-used) for manufacturing automotive body parts such as fenders, bumpers, hoods, grills, with total manufacturing capacity of 150 units per 8 hr. shift. Refaccionaria Martinez, S.A. c/o. Héctor Martinez Martínez (dist., mfr.), Pablo A. de la Garza Nte. 1013, Monterrey, N.L. WTD in prep.

35482 — ITALY — Motor hand saws. Omnia-Motor di Alberto Da Prada (importer, dist., agent), Via Cividale del Friuli 6, 00183 Rome. WTD 11/71.

35485 — MEXICO — Tack (fancy and plain) making machinery of type used by upholsterers. Maldonado, S.A. c/o. Lic. Félix E. Maldonado Díaz (importer, mfr.), Pino Suárez Norte 525, Monterrey, N.L. WTD in prep.

Special industry machinery

● **35500—ALGERIA**—Ministere de l'Industry et de l'Energie, Immeuble "le Colisee," Rue Ahmed bey, Algiers, has issued six international tenders calling for the modernization of six existing brick and tile plants located: Rouiba (2 plants), Reghaia, Le Hamiz, Kolea and Les Attafs. Bid deadline February 15. Specifications (in French) available to firms domiciled in the U.S. on a short-term loan basis from the General Industries Division, BDC-772, U.S. Department of Commerce, Washington, D.C. 20230 ★ (202-967-5520).

● **35500 — INDONESIA** — Perusahaan Negara Perkebunan IV, Ganung Pamela-Tebing Tinggi, Northern Sumatra, Indonesia, has issued invitation to bid No. PMP VI/IDA/IFB/1/71; bid deadline January 28, for the supply of block rubber processing and other machinery. The plan is: A. To install two "off-latex" processing units: Capacity per unit: Phase 1: 12 tons/day (one unit in 1972, one unit in 1973). Phase 2: Extension to 16 tons/day (two units in 1974); B. To install one "off lower-grades" processing unit: Capacity: Phase 1: 12 tons/day (1972). Phase 2: Extension to 16 tons/day (1974); C. To install one processing unit for off-latex and off lower-grades: Capacity 8 tons/day (1972); D. To install one laboratory testing unit (1972); and E. To rehabilitate existing power and water plants (1972/73). Companies which submit tenders for specific items may offer alternative overall rehabilitation plans. Items specifically required are: 2-Gramulators, 3-Hammermills, 4-Conveying Equipment, 1-Filter Equipment, 4-Blending Equipment, 2-Drying Equipment, 2-Bailing Presses, 2-High pressure water units, 2-Control testing equipment, 2-Handling equipment, 1-Water supply units, 3-Power plants and miscellaneous electrical equipment. Quotations shall be made in three parts for each item: A. Net FOB Port-of-Exit Price; B. Estimated ocean freight to Belawan; and C. Total CIF Belawan. Tender must be accompanied by bid bond no less than ¾ of 1 percent of total bid price. Partial shipments of goods will not be allowed nor will transshipment.

35513 — ARGENTINA — Complete sorghum seed elaboration plant to process approximately 500 to 750 tons daily with maximum capacity to handle 1,000 tons. Plant will be processing sorghum seed to obtain ethylic alcohol, glucose, bread flour, as well as animal feeds. Ganadería Guerin S.A., Attn: Mr. José E. Guerin (importer, dist.), Calle 6 N°-42, Cerro de las Rosas, Provincia de Córdoba. WTD in prep.

35513—GERMANY—Attachments, accessories for machinery for beverage industry; small-size food packing machinery, i.e., pneumatic filling machinery, weighing machines, etc. Direct purchase and agency. Gustav Hilbert KG (dist., agent), 40 Syker Strasse, 287 Delmenhorst. WTD 11/71.

35513—PHILIPPINES—One (1) complete set, machinery for manufacture of catsup (washing, filling, capping & labelling machines, boiler, etc.); capacity: 2,000 cases (24 12 oz. bottles a case) per 8 hrs. of operation. Universal Foods Corp., Attn: Hernan Reyes (mfr.), 39 Eulogia Drive, Quezon City. WTD in prep.

35513—SOUTH AFRICA—Beverage bottling machinery including pressure fillers for carbonated beverages, vacuum fillers for uncarbonated beverages; filled bottle washers, driers; champagne capsule crimping machinery. Columbit (Pty.) Ltd. (importer, dist., mfr.), P.O. Box 2737, Cape Town, Cape Province. WTD 11/70.

35520 — VIETNAM — Machinery, equipment for sizing, dyeing, finishing of man-made rayon and nylon yarn. Details in attached specifications. Quotations c.i.f. & c Saigon. VIETNAM KY NGHE TO SOI CONG TY (importer, dist., mfr.), 169 Le Thanh Ton, Saigon. WTD in prep.

35520 — VIETNAM — Complete machinery, equipment for mosquito-net cloth plant. Details in attached specifications. Quotations c.i.f. & c Saigon. Thanh Huong Cong Ty (importer, dist., mfr.), 114 B Nguyen Hue, Saigon. WTD in prep.

35521 — FRANCE — Bleaching, dyeing, finishing equipment. Catalogs, price lists requested. Chaix & Cie (importer, dist., agent), 84-86 route de Bordeaux, 33 La Teste. WTD 12/71.

35540 — SINGAPORE — Bagmaking machinery, toilet roll and napkin making machinery, machinery and equipment for making paper cups, paper drinking straws, strings. Mr. Lee Tian Yew, Mng. Dir., Singapore Paper Products Ltd. (importer), 315 Alexandra Rd., Singapore 3. WTD 11/71.

35550—SINGAPORE—Printing machinery, supplies. Mr. K. Fukatsu, Mgr., Interchem-Toyo (S.E.A.) Ltd. (importer, agent, retailer), 8 Fan Yoong Rd., Jurong Town Singapore 22. WTD 11/71.

35590 — PAKISTAN — Pharmaceutical machinery for manufacture of: coated/uncoated tablets, capsules, liquids, ointments; distilled water 25 to 50 gallons per hr., capacity to fill bottles, phials; medicated glucose (liquids). Requests catalogs, quotations, C. & F., Karachi. Lavii Enterprises (importer), B-5, S.I.T.E., T.M. Khan Rd., P.O. Box 46, Hyderabad Sind. WTD in prep.

35591—INDIA—One pilot plant of half metric ton capacity for stabilization of ferro alloys. Power Cables Pvt. Ltd., Attn: J. M. Patel, Gen. Mgr. (mfr.), P.O. Box No. 4, Kalyan (C.R.), Maharashtra. WTD 6/71.

35595—ITALY—Machinery for manufacture of ophthalmic goods including lens grinding, polishing equipment. Direct purchase & agency. Euroglass Italiana, Industria Ottica (dist., mfr.), Via C. Battisti 156, 00028 Subiaco (Rome). WTD 7/71.

35595—INDIA—Complete plant, equipment to manufacture ball bearings, roller bearings, taper roller bearings. Specifications available from International Business Opportunities Staff, BDC-584, Rm. 4813, U.S. Dept. of Commerce, Washington, D.C. 20230. Parrys (Eastern) Pvt. Ltd. (dist., agent), Dhiraj Chambers, 9 Waudby Rd., Bombay 1. WTD in prep.

35595 — PHILIPPINES — Lasting machines (for shoe industry), automatic or semi-automatic, brand-new or reconditioned. Gems, Maranaw Merchandise Mart, Attn: Hernando R. Mariano (dist., mfr.), Makati Commercial Center, Makati, Rizal D-701. WTD in prep.

General industry machinery

35611—FINLAND — Chemical pumps: horizontal flexible coupled pumps for continuous outdoor service on corrosive or non-lubricating liquids; industrial pumps: horizontal flexible coupled pumps for non-lubricating liquids; low npsh liquid gas pumps: for amines, ammonia, butane, butadiene, ethane, ethylene oxide, flourocarbons, propane and vinyl chloride; power plant pumps: for continuous high pressure pumping of hot chemically treated feed water; intermittent or continuous service. Oy Huber Ab, Commercial Dept., Attn: Mr. L. Söderlund (importer, dist.), P.O. Box 18137, SF-00180, Helsinki 18. WTD 3/71.

35611—NETHERLANDS — Centrifugal pumps for chemical industry. Groneman N.V., Attn: J. G. E. Groneman (importer), 67 Parallelweg SS, Hengelo. WTD in prep.

35612 — NETHERLANDS — Hydraulic pumps, other hydraulic equipment. Rosier-Rosam N.V. (importer, dist.), 20 Textielweg, Amersfoort. WTD 3/71.

35621—GERMANY—Ball bearings to be used for two-stroke engines. Hirth Motoren K. G. (mfr.), Bahnhofstrasse, D-7141 Benningen a. N. WTD 11/71.

35662 — SWITZERLAND — Variable speed V-belt drives. Exclusive distributorship requested. Angst & Pfister AG (importer, dist.), Abteilung TA, Thurgauerstr. 66, 8052 Zurich. WTD 11/71.

35663—SWITZERLAND — Electro-magnetic clutches, clutch/brake combinations, slip, overload releasing clutches, pulley, V-belt clutches, for machine tools. Exclusive distributorship requested. Angst & Pfister AG (importer, dist.), Abteilung TA, Thurgauerstr. 66, 8052 Zurich. WTD 11/71.

35672—INDIA—Arc furnace with shell diameter of 4000 mm, capacity of 20 metric tons a day; scrap basket for processing mild steel scrap. Specifications available from International Business Opportunities, BDC-584, Rm. 4813, U.S. Dept. of Commerce, Washington, D.C. 20230. Mahindra Ugine Steel Co. Ltd. (mfr.), Shree Niketan, Shiv Sagar Estate, Dr. Annie Besant Road, Worli, Bombay 18 WB. WTD 3/71.

35690—INDIA—Scrap processing equipment for processing mild steel turnings, borings having crusher with suitable screen, magnetic separator for separation of non-ferrous metals; briquetting press with capacity of 100 metric tons a day and hydraulic baling press for processing steel sheet cutting with capacity of 150 metric tons a day. Mahindra Ugine Steel Co. Ltd. (mfr.), Shree Niketan, Shiv

Sagar Estate, Dr. Annie Besant Road, Worli, Bombay 18 WB. WTD 3/71.

35690—GERMANY—Electric heaters for swimming pools. Organisation Kollmann GmbH & Co. KG., Attn: Mr. Kollmann (importer, dist.), 5841 Suemmern, Postfach 28. WTD 11/71.

Office, computing, accounting machines

35733 — SOUTH AFRICA — Industrial data processing equipment, especially time data recording system for automatic timekeeping and payroll computation, automatic gatekeeping system using coded data cards, and automatic fuel dispenser system with coded data cards. Electromatic (Pty.) Ltd. (importer), 28 Wiganthorpe Rd., P.O. Box 1252, Pietermaritzburg, Natal. WTD in prep.

35740—PHILIPPINES—Calculating, accounting machines and parts, accessories. Midcity Engineering Services Corp., Attn: Romeo I. Nazario, Sr. (importer, dist., servicing), 875 P. Paredes St., Manila. WTD in prep.

35760—PAKISTAN—Wide variety of scales for 25,000 spindle cotton spinning plant. Specifications available from International Business Opportunities Staff, BDC-584, Rm. 4813, U.S. Dept. of Commerce, Washington, D.C. 20230. Ebrahim Bros. Ltd. (importer), Shaikha House, Campbell St., Karachi. WTD in prep.

35791—FRANCE—Stapling and strapping machines. Direct purchase & agency. Groupement National des Distributeurs en Produits d'Emballage "GEPAC" (importer, dist.), 9 rue du Plâtre, 75-Paris 4. WTD in prep.

35791—PHILIPPINES—Office machines other than calculating, accounting machines. Midcity Engineering Services Corp., Attn: Romeo I. Nazario, Sr. (importer, dist., servicing), 875 P. Paredes St., Manila. WTD in prep.

Service industry machinery

35820—FRANCE—Commercial laundry equipment, drycleaning equipment, clothing presses. Literature, price lists requested. Chaix & Cie (importer, dist., agent), 84/86 route de Bordeaux, 33 La Teste. WTD 12/71.

35850 — GERMANY — Dehumification plants for use in swimming pool halls. Organisation Kollmann GmbH & Co. KG., Attn: Mr. Kollmann (importer, dist.), 5841 Suemmern, Postfach 28. WTD 11/71.

35852—NETHERLANDS—Air conditioning equipment for households, large buildings. Exclusive representations or license arrangements. Machinefabriek De Bruijn N.V., Attn: Mr. T. Kelderman (importer, mfr.), 70 Oldenzaalsestraat, P.O. Box 92, Enschede. WTD in prep.

35852—NETHERLANDS—Air conditioning equipment. Rosier-Rosam N.V. (importer, dist.), 20 Textielweg, Amersfoort. WTD 3/71.

35852—GERMANY — Air conditioning systems for office buildings; upper income housing. SANICENTRAL GmbH. (contractor), 6600 Saarbruecken 2, Am Torhaus 23. WTD 11/71.

35853—SURINAM—Large cold storage depot (approx. 10,000 sq. ft. of usable storage space) for long term storage of fresh vegetables. Surinam Chamber of Commerce & Industry, Attn: Mr. Mohammed Raja, Dr. J. C. de Mirandastraat 10, Paramaribo.

35860—THAILAND—Pumps, non-combustion type, for dispensing alcohol, 4 units. Requests catalogs, c.i.f. Bangkok prices. Eastern Chemical Co., Ltd. (mfr.), 421 Mahaprutaram Rd., Bangkok. WTD in prep.

35892—THAILAND—Water treatment system, automatic, with capacity of 4 cu. tons per hr. Requests catalogs, c.i.f. Bangkok prices. Eastern Chemical Co., Ltd. (mfr.), 421 Mahaprutaram Rd., Bangkok. WTD in prep.

Machinery

35991—GERMANY — Carburetors, pistons, cylinders, oil seals for two-stroke motors. Hirth Motoren K. G. (mfr.), Bahnhofstrasse, D-7141 Benningen a. Neckar. WTD 11/71.

35992 — MEXICO — Mechanized equipment for amusement park for children, including carrousels, "whip" rides, wheels, similar items. Lic. Arnulfo FLORES Rodríguez Prevision Social Grupo Industrial, Apartado Postal 676, Monterrey, N.L.

Electric transmission, distribution equipment

● **36100—GREECE**—10 HV/MV Substations, in Crete and Rhodes: design, manufacture, delivery, construction, operation and testing. Public Power Corporation (DEH), Chalkokondyli St., Athens 102. Tender No. DMKD-927, bid deadline February 1. Specifications available on a short-term loan basis to firm domiciled in U.S., from Power and Electrical Equipment Program, BDC-776, U.S. Department of Commerce, Washington, D.C. 20230. ☎ (202-967-5585). Bids providing for payment in Greek agricultural products will be given early consideration, regardless of price. Additional factors are local content of 30 percent plus, credit of long term nature, and early delivery.

36110—SPAIN—Electric measuring instruments. Correspondence requested in Spanish/French. Instrumentos Electrónicos de Precisión, S.A. (IEP) (importer, dist.), Alcalde Saínz de Baranda, 39, Madrid (9). WTD 11/71.

36130—SPAIN—Switchgear, switchboard apparatus. Correspondence requested in Spanish/French. Instrumentos Electrónicos de Precisión, S.A. (IEP) (importer, dist.), Alcalde Saínz de Baranda, 39, Madrid (9). WTD 11/71.

Electrical industrial apparatus

36218—FRANCE—Wrapping paper, paper bags. Direct purchase & agency. Groupement National des Distributeurs en Produits d'Emballage "GEPAC" (importer, dist.), 9 rue du Plâtre, 75-Paris 4. WTD in prep.

36231—IRAN—Welding machinery. Gulf Supply, Mostafa Haghayegh & Bros. (importer, dist., agent), Pahlavi Ave., P.O. Box 33, Abadan. WTD 10/71.

Household appliances

36340 — GERMANY — Electric sauna heaters, also convection type; Electric room dehumidifiers. Organisation Kollmann GmbH & Co. KG., Attn: Mr. Kollmann (importer, dist.), 5841 Suemmern, Postfach 28. WTD 11/71.

36391 — GERMANY — Electric water heaters. Organisation Kollmann GmbH & Co. KG., Attn: Mr. Kollmann (importer, dist.), 5841 Suemmern, Postfach 28. WTD 11/71.

Electric lighting, wiring equipment

36422—SINGAPORE—Table lamps, ceiling lamps, chandeliers. Mgr., Vasta Co. (Pte) Ltd. (importer, dist.), 220-A Tanjong Katong Rd., Singapore 15. WTD in prep.

Communication equipment

36623—NETHERLANDS — Microwave, ultrasonic burglar alarm equipment; other crime detection, prevention equipment. Direct purchase and/or agency. Alarm Equipment Supplies Nederland, Attn: R. J. J. Th. Schraven, Gen. Mgr. (importer, dist., installer/exporter), 9 Koningsweg, 's-Hertogenbosch. WTD 10/71.

Electronic components, accessories

36710—SPAIN—Electron tubes, receiving type. Correspondence requested in Spanish/French. Instrumentos Electrónicos de Precisión, S.A. (IEP) (importer, dist.), Alcalde Saínz de Baranda, 39, Madrid (9). WTD 11/71.

36730—SPAIN—Electron tubes, transmitting type. Correspondence requested in Spanish/French. Instrumentos Electrónicos de Precisión, S.A. (IEP) (importer, dist.), Alcalde Saínz de Baranda, 39, Madrid (9). WTD 11/71.

36740—GERMANY—Transistors, diodes, rectifiers, capacitors. Correspondence requested in German. ISA-Elektronik (importer, dist., agent), 34 Geigersbergstrasse, D-7500 Karlsruhe 41, Baden-Wuerttemberg. WTD 11/71.

36740—SPAIN—Semiconductors. Correspondence requested in Spanish/French. Instrumentos Electrónicos de Precisión, S.A. (IEP) (importer, dist.), Alcalde Saínz de Baranda, 39, Madrid (9). WTD 11/71.

36790—ITALY—Electronic components, accessories; including antenna, capacitors electronics, electronic circuits, etc. F.lli Panzera, S.p.A. (importer, dist., retailer), Via Maddalena 12, 98100 Messina. WTD 11/71.

36790—SPAIN—Electronic components, including: capacitators, resistors, coils, transformers, reactors, chokes for electronic applications and all other electronic components, accessories. Correspondence requested in Spanish/French. Instrumentos Electrónicos de Precisión, S.A., (IEP) (importer, dist.), Alcalde Saínz de Baranda, 39, Madrid (9). WTD 11/71.

Electrical machinery, supplies

36930—NETHERLANDS — Electromedical equipment for use in hospitals. G.L. Loos & Co.'s Fabrieken N.V., Attn: Mr. I. Regout (importer, dist.), Kabelweg 37, Amsterdam. WTD 6/71.

36945—GERMANY — Dynamo magneto ignition units for two-stroke engines. Hirth Motoren K. G. (mfr.), Bahnhofstrasse, D-7141 Benningen a. N. WTD 11/71.

Motor vehicle equipment

37141—PHILIPPINES — Motor vehicle parts, accessories. Wilcon Enterprises, Attn: Conrado Ching, Gen. Mgr. (importer, dist., exporter), Suite 618, Citizens Bank Bldg., 411 Rosario St., P.O. Box 1925, Manila. WTD in prep.

Aircraft, parts

37213—SOUTH AFRICA—One of following World War II veteran planes for show & racing purposes: P 51 Mustang or Bearcat, or Corsair or P 38 Lightning. Aircraft should have certificate of airworthiness. Vantage Property Trust (Pty.) Ltd., Attn: H. J. Cohen (mfr.), P.O. Box 2564, Johannesburg, Transvaal. WTD in prep.

Engineering, laboratory, scientific, research instruments

● **38100—COLOMBIA**—Empresas Publicas de Medellin has published tender for laboratory equipment for its water treatment plant including electric balance, turbidimeters, bacteriological analysis equipment. Bid deadline February 7. Terms and specifications available for 150 pesos per copy (20.71 Colombian pesos equals US $1.00) from Seccion de Importaciones, Edificio Miguel de Aguinaga Oficiana 607, Medellin.

38112 — NETHERLANDS — Sophisticated laboratory, scientific instruments for industrial, hospital use. G. L. Loos & Co.'s Fabrieken N.V., Attn: Mr. I. Regout (importer, dist.), Kabelweg 37, Amsterdam. WTD 6/71.

Instruments for measuring, controlling, indicating physical characteristics

38213—AUSTRIA — Industrial process control equipment, pollution control equipment, pneumatic equipment, industrial pumps. Direct purchase & agency. Herberts Ges.m.b.H. & Co. K. G. (importer, dist. (wholesale), agent), Attemsgasse 11, A-1222 Vienna. WTD 11/71.

38216—NETHERLANDS — Air pollution measuring equipment; equipment for measuring purification of waste water; X-Y plotters and recorders; dual head isotope scanners. Nenimij N.V.; Attn: Miss H. Spoelstra (importer, dist.), P.O. Box 2325, The Hague. WTD in prep.

Surgical, medical, dental instruments

38410 — NETHERLANDS — Medical equipment for use in hospitals. G. L. Loos & Co.'s Fabrieken N.V., Attn: Mr. I. Regout (importer, dist.), 37 Kabelweg, Amsterdam. WTD 6/71.

38430—GERMANY—Dental equipment, supplies. E. & H. Renfert (dist., mfr., exporter), 6 Weiherstrasse, P.O. Box 724, D-7700 Singen/Hohentwiel, Baden-Wuerttemberg. WTD 3/71.

Ophthalmic goods

38512 — ITALY — Ophthalmic lenses. Euroglass Italiana, Industria Ottica (dist., mfr.), Via C. Battisti 156, 00028 Subiaco (Rome). WTD 7/71.

Photographic equipment

● **38600—KOREA**—Supply of one set electronically controlled automatic precision enlarger. Tender No. KDB-KFW-11, bid deadline January 11. Invited by the Foreign Loan Department, The Korea Development Bank (KDB), C.P.O. Box 28, Seoul, Korea. Terms and specifications available, on short term loan basis, from the Business, Photographic and Scientific Equipment Division, BDC-708, U.S. Department of Commerce, Washington, D.C. 20230. ★(202-967-2939).

Watches, clocks, parts

38711—SPAIN—Timing apparatus, especially to control time employed by laborers on off-plant jobs. Universal Export, S.A. (importer, dist.), Claudio Coello, 77, Madrid (1). WTD 12/71.

Agencies

Specific foreign firms have expressed interest in agency agreements for the products listed below. Exclusive agencies for these products are wanted only if specified.

Field crop farms

01130—LEBANON—Wheat, rice, barley. The Middle East Business Services & Research Corp. (BSR) S.A.L. (importer, agent), Sabbagh Bldg., Hamra St., P.O. Box 2400, Beirut. WTD 11/71.

01193—LEBANON — Sugar. The Middle East Business Services & Research Corp. (BSR) S.A.L. (importer, agent), Sabbagh Bldg., Hamra St., P.O. Box 2400, Beirut. WTD 11/71.

Fruit, tree nut, vegetable farms

01225 — LEBANON — Green coffee. The Middle East Business Services & Research Corp. (BSR) S.A.L. (importer, agent), Sabbagh Bldg., Hamra St., P.O. Box 2400, Beirut. WTD 11/71.

Sighting, fire control equipment

19410—ITALY—Telescopic sights (riflescopes) for small firearms. Guglielmo Demarchi & C. (importer, dist., agent), Via Gobetti 11, 10123 Torino. WTD 4/71.

Small arms

19512—ITALY — Small firearms parts, attachments, specifically including gun cases (metal, leather, plastics, etc.), cleaning kits. Guglielmo Demarchi & C. (importer, dist., agent), Via Gobetti 11, 10123 Torino. WTD 4/71.

Small arms ammunition

19610—ITALY—Small firearms ammunition. Guglielmo Demarchi & C. (importer, dist., agent), Via Gobetti 11, 10123 Torino. WTD 4/71.

Meat products

20118 — LEBANON — Canned meats, frozen meats. The Middle East Business Services & Research Corp. (BSR) S.A.L. (importer, agent), Sabbagh Bldg., Hamra St., P.O. Box 2400, Beirut. WTD 11/71.

Dairy products

20210—LEBANON—Butter. The Middle East Business Services & Research Corp. (BSR) S.A.L. (importer, agent), Sabbagh Bldg., Hamra St., P.O. Box 2400, Beirut. WTD 11/71.

20220 — LEBANON — Natural and processed cheese. The Middle East Business Services & Research Corp. (BSR), S.A.L. (importer, agent), Sabbagh Bldg., Hamra St., P.O. Box 2400, Beirut. WTD 11/71.

20231—LEBANON — Skimmed powdered milk. The Middle East Business Services & Research Corp. (BSR) S.A.L. (importer, agent), Sabbagh Bldg., Hamra St., P.O. Box 2400, Beirut. WTD 11/71.

Canning, preserving foods

20330—LEBANON—Canned fruits, vegetables. The Middle East Business Services & Research Corp. (BSR) S.A.L. (importer, agent), Sabbagh Bldg., Hamra St., P.O. Box 2400, Beirut. WTD 11/71.

20334—CANADA—Single strained Florida orange juice and grapefruit juice in 6 oz., 19 oz. and 46 oz. cans. Mitchell Agencies Ltd. (dist., agent), Kenmount Rd., P.O. Box 5638, St. John's, Newfoundland. WTD in prep.

20361 — LEBANON — Frozen packaged fish, other seafood, including soup. The Middle East Business Services & Research Corp. (BSR) S.A.L. (importer, agent), Sabbagh Bldg., Hamra St., P.O. Box 2400, Beirut. WTD 11/71.

Grain mill products

20411 — LEBANON — Wheat flour. The Middle East Business Services & Research Corp. (BSR) S.A.L. (importer, agent), Sabbagh Bldg., Hamra St., P.O. Box 2400, Beirut. WTD 11/71.

Food preparations

20960 — LEBANON — Shortening, table oils, margarine, other edible oils, fats. The Middle East Business Services & Research Corp. (BSR) S.A.L. (importer, agent), Sabbagh Bldg., Hamra St., P.O. Box 2400, Beirut. WTD 11/71.

20999—LEBANON—Packaged tea. The Middle East Business Services & Research Corp. (BSR) S.A.L. (importer, agent), Sabbagh Bldg., Hamra St., P.O. Box 2400, Beirut. WTD 11/71.

Textile goods

22981—FRANCE—Ropes made of hemps, sisal, cotton, flax, nylon, polypropylene, jute, coir, other fibers. G.E.P.A.C. (importer, dist.), 9, rue du Plâtre, 75-Paris 4e. WTD in prep.

Men's, youths', boys' furnishings, work clothing

23282—CANADA — Disposable doctor's medical uniforms; disposable doctor's masks, gowns, other hospital apparel for males. Exclusive agency. Spectrex Ltd. (importer, dist., agent), 2245 St. Francois Road, Dorval 740, Quebec. WTD 2/71.

Women's, misses', juniors' outerwear

23392—CANADA — Disposable women's hospital garments for nurses, maids, female patients. Exclusive agency. Spectrex Ltd. (importer, dist., agent), 2245 St. Francois Road, Dorval 740, Quebec. WTD 2/71.

Fabricated textile products

23928—CANADA — Disposable hospital sheets, pillowcases. Exclusive agency. Spectrex Ltd. (importer, dist., agent), 2245 St. Francois Road, Dorval 740, Quebec. WTD 2/71.

Paper mills

26218 — FRANCE — Fancy wrapping paper. G.E.P.A.C. (importer, dist.), 9, rue du Plâtre, 75-Paris 4e. WTD in prep.

Converted paper, paperboard products

26430 — JAMAICA — Bags, paper; sizes from 1 to 25 lbs., printed and plain. Canalco Sales Distributors Ltd., Attn: Herval West, Mng. Dir. (importer, agent, retailer), 131 East St., Kingston. WTD 4/71.

26450—JAMAICA—Cardboard for making cardboard boxes. Canalco Sales Distributors Ltd., Attn: Herval West, Mng. Dir. (importer, agent, retailer), 131 East St., Kingston. WTD 4/71.

26490 — JAMAICA — Paper, stationery. Samples required of various types, qualities. Canalco Sales Distributors Ltd., Attn: Herval West, Mng. Dir. (importer, agent, retailer), 131 East St., Kingston. WTD 4/71.

Books

27315 — AUSTRALIA — Juvenile books; child guidance books. Educational Aids (Aust.) Pty. Ltd., Attn: S.O. Wainwright, Mng. Dir. (dist., mfr., agent), Corner Davis and Hopkins St., Wingfield, S.A., P.O. Box 1309, Adelaide, S.A. WTD 11/71.

Industrial chemicals

28122 — SUDAN — 2000 MT of caustic soda solid and flakes for soap, other industries. Modern Supplies Agency (agent), P.O. Box 1805, Khartoum. WTD in prep.

28134—SUDAN—Freon 12 Can O Gas. Modern Supplies Agency (agent), P.O. Box 1805, Khartoum. WTD in prep.

28163 — SUDAN — 50 MT Ultramarine blue M/T461 raw material for blue laundry industries. Modern Supply Agency (agent), P.O. Box 1805, Khartoum. WTD in prep.

28183 — ITALY — Rubber processing chemicals. GART, Gomma Affini Rappresentanze Torino (importer, agent), Corso Matteotti 42, 10121 Torino. WTD 5/71.

28194 — SUDAN — 50 MT citric acid manohydrate SUP17 for use in soft drinks manufacturing. Modern Supplies Agency (agent), P.O. Box 1805, Khartoum. WTD in prep.

Synthetic materials

28214—FRANCE—Epoxy and polyester resins for electrical industry. Vial & Cie. (agent), 18 rue Volney, 75-Paris 2. WTD in prep.

28215—VIETNAM—Bakelite sheet: size 1 square meter; thickness: m/m 1-2-3-4-5-6-10-15-20-25-30; color: yellow; resin: phenolic; base: paper. Semi-cold punching for use in electric line (general electronic appliances) and machinery (70-130°C). A Son (Montasie Representative) (agent), 66-A Cong Ly, P.O. Box 1061 Saigon. WTD 7/71.

Drugs

28340—INDIA—Wide range of life-saving drugs, medicines for human use. Complete list available from International Business Opportunities Staff, BDC-584, Rm. 4813, U.S. Dept. of Commerce, Washington, D.C. 20230. J. T. Jagtiani (importer, agent), National House, Tulloch Rd., Apollo Bunder, Bombay 1. WTD 11/71.

28342 — FRANCE — Non-prescription drugs to aid smokers to eliminate tobacco habit. Distribufrance (importer, retailer), 35 rue de la Croix de Montjous, 33-Gradignan. WTD in prep.

Soap, detergents, cleaning preparations, perfumes, cosmetics

28415—SURINAM—Powdered and liquid laundry, dishwashing, household cleaning and antiseptic preparations. E. H. Wijngaarde & Co. (importer, agent), P.O. Box 183, Paramaribo, Surinam. WTD in prep.

28416—SWITZERLAND — Detergents, cleaning preparations for industry. E. Hummel & Co. (dist., mfr., agent), Eidgenossenweg 14a, 4052 Basel. WTD 12/71.

28445—SWITZERLAND—Raw chemical preparations for cosmetics; novelty cosmetics, toilet preparations. E. Hummel & Co. (dist., mfr., agent), Eidgenossenweg 14a, 4052 Basel. WTD 12/71.

28445—SWITZERLAND — Cosmetic accessories like artificial eyelashes, beauty aids, except cosmetic preparations. P. & H. Fricker (importer, dist.), Seestrasse 58, 8803 Rüschlikon. WTD 12/71.

Chemical products

28993 — SWITZERLAND — Advanced chemical preparations, raw, bulk, semi-finished or finished, for construction, paint, plastics, chemical, pharmaceutical, cosmetics, cleaning, metalworking, automotive industries, incl. insulation and rust preventions products. E. Hummel & Co. (dist., mfr., agent), Eidgenossenweg 14a, 4052 Basel. WTD 12/71.

Rubber footwear

30210—JAMAICA—Sandals, rubber; for beach, shower. Vernon Lindo Ltd., Attn: Vernon C. Lindo, Mgr. (importer, agent, retailer), P.O. Box 28, Ocho Rios, St. Ann. WTD 4/71.

Fabricated rubber products

30690—JAMAICA—Rubber products for beach or pool, including balls, bathing caps, bath mats, life jackets, life preservers, life rafts, air mattresses. Vernon Lindo Ltd., Attn: Vernon Lindo, Mgr. (importer, agent, retailer), P.O. Box 28, Ocho Rios, St. Ann. WTD 4/71.

Plastic products

30790—JAMAICA—Plastic products for picnics, beach, or garden, including carafes, containers, portable ice chests and coolers, life rafts. Vernon Lindo Ltd., Attn: Vernon Lindo, Mgr. (importer, agent, retailer), P.O. Box 28, Ocho Rios, St. Ann. WTD 4/71.

30791—FRANCE — Polypropylene bags (all sizes). Direct purchase & agency. Groupement National des Distributeurs en Produits d'Emballage "GEPAC" (importer, dist.), 9 rue du Plâtre, 75-Paris 4. WTD in prep.

30794—CANADA — Disposable plastic-type cups, tumblers for hospitals. Exclusive agency. Spectrex Ltd. (importer, dist., agent), 2245 St. Francois Road, Dorval 740, Quebec. WTD 2/71.

30797—CANADA — Disposable plastic-type dishes, tableware for hospitals. Exclusive agency. Spectrex Ltd. (importer, dist., agent), 2245 St. Francois Road, Dorval 740, Quebec. WTD 2/71.

Footwear, except rubber

31410—JAMAICA—Beach sandals, novelty slippers or shoes. Vernon Lindo Ltd., Attn: Vernon Lindo, Mgr. (importer, agent, retailer), P.O. Box 28, Ocho Rios, St. Ann. WTD 4/71.

Glass, glassware

32210 — CANADA — Disposable ampuls, vials (such as used for urine specimens) for medical use. Exclusive agency. Spectrex Ltd. (importer, dist., agent), 2245 St. Francois Road, Dorval 740, Quebec. WTD 2/71.

32291—CANADA—Disposable glass or fiberglass drinking straws; tumblers, tableware for hospitals. Exclusive agency. Spectrex Ltd. (importer, dist., agent), 2245 St. Francois Road, Dorval 740, Quebec. WTD 2/71.

Abrasive, asbestos, nonmetallic mineral products

32910—SWITZERLAND—Rubber bonded abrasives, novelty and advanced abrasives, sandblasting materials, all kinds. Willi Metzger & Co. (importer, dist., agent), Freiestrasse 48, 8952 Schlieren. WTD 10/71.

32912 — ITALY — Grinding wheels. SIX, S.a.S. (dist., mfr., agent), Via S. Quintino 23, 10121 Torino. WTD in prep.

Steel mill products

33120—PHILIPPINES—Rails, relayable, 35 lbs., ASCE, preferably used with not more than 10% wear. Arthur M. Hain & Co., Inc., Attn: Arthur M. Hain, Jr. (agent), 62 Buendia, Makati, Rizal. WTD 2/71.

33167 — PAKISTAN — Cold rolled steel sheets. Requests catalogs, quotations, C. & F., Karachi. Everest Corp. (agent), Rawalpindiwalla Bldg., Serai Rd., Karachi. WTD in prep.

Secondary smelting, refining of nonferrous metals

33414—KOREA—Zinc dross, 94% or up, for refinery. Monthly requirement 10 M/T. C&f Inchon quotations requested. Frazar International (Korea) Ltd. (agent), I.P.O. Box 1108, Seoul. WTD in prep.

Fabricated structural metal products

34431—ITALY—Plate heat exchangers. SCAM, Societa' di Condensazione ed Applicazioni Meccaniche (importer, dist., mfr.), Via Arcivescovado 7, 10121 Torino. WTD 3/71.

34440—ISRAEL—"Bubble" buildings for housing, greenhouses, storerooms, etc. of various sizes. Exclusive agency. Nesim Cordova (importer, dist./wholesale, agent), P.O. Box 1440, Tel Aviv 61000. Cable address: NESILCO TELAVIV. WTD in prep.

34492—THAILAND—Silos, grain storage, metal. Requests catalogs, c.i.f. Bangkok prices. Kejsuma Ltd. Partnership (importer, dist.), 3rd Floor, Ploenchit Arcade, 1037 Ploenchit Rd., Bangkok. WTD in prep.

Fabricated metal products

34940—NETHERLANDS — Valves and pipe fittings for oil, petrochemical, chemical, food industries; Exclusive representations for Benelux countries. N.V. Industriemaatschappij TRANSMARK (importer, dist., agent), 57 Hooftlaan, P.O. Box 30, Bussum. WTD 11/71.

34941—ENGLAND—Solenoid valves for control of pneumatic and hydraulic systems at pressures over 2,000 psi, and components; electrical or mechanical and associated sensing instruments. Automation Components (Molesey) Ltd. (importer, dist., mfr.), 10 Joanna House, St. Philip's Ave., Worcester Park, Surrey. WTD in prep.

34943—GERMANY—Valves, fittings for chemical, petrochemical industries; stainless steel, carbon steel, or exotic alloys only. Truflo GmbH. (Dist.), 6000 Frankfurt 60, Grosse Spillingsgasse 36. WTD 12/71.

34946—GUATEMALA—Hose and fittings for gasoline service station. Correspondence requested in English and

Spanish. Elevadores y Maquinaria (importer, dist., agent), 11 Avenida 17-44, Zona 1, P.O. Box 220, Guatemala City. WTD 12/71.

Engines, turbines

35190—PHILIPPINES — Engines, gasoline/diesel, 3 to 14 H.P., for use with generators, compressors. Vic's Construction Supply, Attn: Ruben T. Velasquez (dist., agent, retailer), 370-376 Dasmarinas St., Manila. WTD in prep.

35193—SINGAPORE—Diesel and gasoline engines for marine application from 70 to 300 horsepower capacity. George R. Narcis, Sales & Service Mgr., Lees Industries (S) Pte. Ltd. (mfr., retailer), 7 Wan Shih Rd., Jurong Town, Singapore 22. WTD in prep.

Farm machinery

35222—FRANCE—Compact lightweight vacuum pulsator for use on bucket units and pipe line milkers; pulsator should give 2 x 2 milking and ratio pulsation. Master pulsator system of simple design and efficient operation giving 2 x 2 milking and ratio pulsation. S.A. Gascoigne France Attn: M. Layley, (dist., mfr., retailer), 6/8 rue de Soubise, 93—Saint-Quen. WTD in prep.

35224 — THAILAND — Disc plows, agricultural. Requests catalogs, c.i.f. Bangkok prices. Kejsuma Ltd. Partnership (importer, dist.), 3rd Floor, Ploenchit Arcade, 1037 Ploenchit Rd., Bangkok. WTD in prep.

35228 — FRANCE — Corn driers (silos with heated ventilation—60 to 67 cubic ft.). Perrot-France (importer, dist.), 70/76 rue Jean-Jacques Rousseau, 78-Houilles. WTD 9/71.

35228 — SURINAM — Small tractors, related accessories, shovels, hoes, small irrigation pumps, other similar tools and machinery for agricultural purposes. E. H. Wijngaarde & Co. (importer, agent), P.O. Box 183, Paramaribo, Surinam. WTD in prep.

35228—THAILAND—Poultry and cattle feeding and watering equipment; Feed grinders, crushers, mixers. Requests catalogs, c.i.f. Bangkok prices. Kejsuma Ltd. Partnership (importer, dist.), 3rd Floor, Ploenchit Arcade, 1037 Ploenchit Rd., Bangkok. WTD in prep.

Construction, mining, materials handling machinery, equipment

35310—SWITZERLAND — Heavy-duty, medium-size construction machinery, all kinds; related equipment. Requests offers from manufacturers of new equipment only. Intomatic Volketswil AG, Attn. Mr. Chr. Wieser, Gen. Mgr. (importer, dist., agent), P.O. Box 829, 8603 Schwerzenbach. WTD in prep.

35319 — SINGAPORE — Earth moving equipment (first-class quality). E. R. Shaw, Mgr., Wearne's Equipment & Land Co. (Pte) Ltd. (importer, dist., agent), 45 Leng Kee Rd., Singapore 3. WTD 10/71.

35320—ARGENTINA — Drills, drilling equipment, car dumpers, mining machinery, equipment, oil crushers, stone grinders, pulverizers. Fernández y Abelleira S.A. (J.C. Fairlle) (dist.), Av. Bernardino Rivadavia 861, Avellaneda, Pcia. de Buenos Aires. WTD in prep.

35320 — JAMAICA — Crushers, stone; minimum capacity 200 cubic yds. per hr. Canalco Sales Distributors Ltd., Attn: Herval West, Mng. Dir. (importer, agent, retailer), 131 East St., Kingston. WTD 4/71.

35330—UNITED KINGDOM—Oil drilling machinery, equipment. Cosalt Ltd., Attn: C. J. Dexter, Area Mgr. (dist., mfr., retailer), 174 Market St., Aberdeen, AB9 2FF, Scotland. WTD in prep.

35340—GUATEMALA—Automobile lifts (service station, garage type). Correspondence requested in English and Spanish. Compañía de Elevadores y Maquinaria (importer, dist., agent), 11 Avenida 17-44, Zona 1, P.O. Box 220, Guatemala City. WTD 12/71.

35340—PAKISTAN—Elevators to handle 6-12 passengers. Requests catalogs, quotations, C. & F., Karachi. Orval Landis Associates Ltd. (agent), 21-E (A), Block 6, P.E.C.H.S., Karachi. WTD 5/71.

35370—SURINAM — Industrial vehicles such as fork trucks using either gasoline, diesel or storage battery power; tractors in aforementioned categories. E. H. Wijngaarde & Co. (importer, agent), P.O. Box 183, Paramaribo, Surinam. WTD in prep.

Metalworking machinery

35418 — MEXICO — Additional lines of automatic screw-making machinery and accessories, primarily with unit values of under $2,000 or special lines unique in Mexico. Present lines include wire drawing and resizing machines, screw pinch pointers and shank slotters, used thread rollers and bolt trimmers, spring testers and coilers, nut tappers, and wire straightening, cutoff equipment. Ing. Charles F. Fletcher (importer, agent), Apdo. Postal 32-236, Mexico 1, D.F. WTD in prep.

35452—VENEZUELA—Pneumatic tools for automotive assembly. Mr. Hector P. Zarragoitia, La Casa de las Pinturas (importer, dist.), Avda Principal de Colinas de Bello Monte, Edf San Miguel, Local 2, Caracas 101. WTD in prep.

35453—ITALY — Metalworking magnetic chucks. SIX, S.a.S. (dist., mfr., agent), Via S. Quintino 23, 10121 Torino. WTD in prep.

35453—SWITZERLAND—Chip collecting tools for machine tools, abrasion jobs. Willi Metzger & Co. (importer, dist., agent), Freisstrasse 48, 8952 Schlieren. WTD 10/71.

35484—GUATEMALA—Wheel balancers, sparkplug cleaners, wheel spinners, etc. Correspondence requested in English and Spanish. Elevadores y Maquinaria (importer, dist., agent), 11 Avenida 17-44, Zona 1, P.O. Box 220, Guatemala City. WTD 12/71.

Special industry machinery

35510—JAMAICA—Mills; minimum capacity of 25 lb. per hr. for grinding corn, black pepper. Canalco Sales Distributors Ltd., Attn: Herval West, Mng. Dir. (importer, agent, retailer), 131 East St., Kingston. WTD 4/71.

35513—ARGENTINA — Sugar packing and packaging machinery. Cándido Borga (dist.), Carlos Pellegrini 672, Villa María, Provincia de Córdoba. WTD in prep.

35513—SURINAM — Advanced line of high capacity rice milling equipment. E. H. Wijngaarde & Co. (importer, agent), P.O. Box 183, Paramaribo. WTD in prep.

35591 — NETHERLANDS — Chemical manufacturing industries machinery, equipment. Hydrochemie N.V., Attn: H. J. Fisher (importer, dist.), Nieuwe Uitleg 29, The Hague. WTD 11/71.

35593—FRANCE—Automatic and semi-automatic machinery for plastic impregnation. Vial & Cie. (agent), 18 rue Volney, 75–Paris 2. WTD in prep.

35593 — ITALY — Plastics-working machinery, equipment. GART, Gomma Affini Rappresentanze Torino (importer, agent), Corso Matteotti 42, 10121 Torino. WTD 5/71.

35593—VENEZUELA—Plastics working machinery, equipment (automatic equipment in general). Correspondence requested in Spanish. Ing. Americo Uhri Maquinarias Uhri, S.R.L. (importer, agent), Apartado N°50.984, Caracas. WTD in prep.

35594 — ITALY — Rubber-working machinery, equipment. GART, Gomma Affini Rappresentanze Torino (importer, agent), Corso Matteotti 42, 10121 Torino. WTD 5/71.

35595—JAMAICA—Electroplating equipment to do chroming of cutlery or car trimming. Electrical equipment requires 50 cycle, 220 V, 3 phase. Canalco Sales Distributors Ltd., Attn: Herval West, Mng. Dir. (importer, agent, retailer), 131 East St., Kingston. WTD 4/71.

35595 — SWITZERLAND — Materials, tools, accessories for sandblasting machinery, and jobs. Willi Metzger & Co. (importer, dist., agent), Freiestrasse 48, 8952 Schlieren. WTD 10/71.

General industry machinery

35610—NETHERLANDS—Pumps for oil, petrochemical, chemical, food industries. Exclusive representations for Benelux countries. N.V. Industriemaatschappij TRANSMARK (importer, dist., agent), 57 Hooftlaan, P.O. Box 30, Bussum. WTD 11/71.

35611—SINGAPORE — Concrete pumps for construction purposes. E. R. Shaw, Mgr., Wearne's Equipment & Land Co. (Pte) Ltd. (importer, agent, retailer), 45 Leng Kee Rd., Singapore 3. WTD 10/71.

35615—VENEZUELA—Industrial paint spraying equipment. Mr. Hector P. Zarragoitia, La Casa de las Pinturas (importer, dist.), Avda Principal de Colinas de Bello Monte, Edf San Miguel, Local 2, Caracas 101. WTD in prep.

35642—GERMANY—Equipment for air-cleaning, especially for dust control. Airfilter Co. GmbH (mfr., agent, exporter), 2 Hauptstrasse, D-7107 Bad Friedrichshall, Baden-Wuerttemberg. WTD 11/71.

35642—KOREA—Blowers and fans; air washers; dust collection, other air purification equipment for use in plants, surgical operating rooms; industrial gas cleaning systems. Catalogs, f.o.b. and c.i.f. Pusan and/or Inchon quotations requested. Nam Buk Medical Instrument Co. (importer, dist., agent), K.P.O. Box 208, Seoul. WTD 6/71.

35662—ITALY—Alternating current motor speed drives, inverters. SIX, S.a.S. (dist., mfr., agent), Via S. Quintino 23, 10121 Torino. WTD in prep.

35673—PHILIPPINES — One (1) piece, induction furnace, capacity: 500 kg.; one (1) piece, induction furnace, capacity: 1,000 kg. Arthur M. Hain & Co., Inc., Attn: Arthur M. Hain, Jr. (agent), 62 Buendia Ave., Makati, Rizal. WTD 2/71.

35690—GUATEMALA—Pneumatic, hydraulic jacks. Correspondence requested in English and Spanish. Elevadores y

Maquinaria (importer, dist., agent), 11 Avenida 17-44, Zona 1, P.O. Box 220, Guatemala City. WTD 12/71.

35690—ITALY—Industrial dust-filtering, fume-filtering, water-purifying, anti-pollution apparatus, equipment. SIX, S.a.S. (dist., mfr., agent), Via S. Quintino 23, 10121 Torino. WTD in prep.

35690—ITALY—Industrial water-purifying apparatus, equipment. SCAM, Societa' di Condensazione ed Applicazioni Meccaniche (importer, dist., mfr.), Via Arcivescovado 7, 10121 Torino. WTD 3/71.

35690—SOUTH AFRICA—Metal edge-to-edge industrial filters. Johannesburg Grease Equipment Co. (Pty.) Ltd., Attn: H. W. Smith (importer, agent), P.O. Box 57078, Springfield, Transvaal. WTD 11/71.

Office, computing machines

35731—FRANCE—All types of peripherals for electronic data processing equipment, principally memories. COMSATEC (importer, agent, exporter), 134, ave. de Malakoff, Paris 16e. WTD 5/71.

35731 — SWITZERLAND — Electronic data processing equipment, peripherals. Comptronix, Attn: P. Rohner, Mgr. (dist., agent), Drusbergstrasse 19, 8810 Horgen/ZH. WTD 7/71.

35733—FRANCE — Parts, attachments for electronic computing equipment, principally memories. COMSATEC (importer, agent, exporter), 134, ave. de Malakoff, Paris 16e. WTD 5/71.

35733 — SWITZERLAND — Electronic data processing software (packages) for commercial (business) applications. Jina & Co. EDP-Programming (agent, EDP consultant), Baumackerstrasse 42, P.O. Box 301, 8050 Zurich. WTD in prep.

35743—FRANCE — Parts, attachments for computing machines, principally memories. COMSATEC (importer, agent, exporter), 134, ave. de Malakoff, Paris 8e. WTD 5/71.

35791—SWITZERLAND — Genuine novelty office machinery, such as addressing, dictating, collating, sorting, mailing machines, except duplicators and computers. Cäsar Muggli (importer, agent, retailer), Linteschergasse 15, 8023 Zurich. WTD 11/70.

Service industry machines

35811 — AUSTRALIA — Coin counting, coin sorting, banknote changing machines. Setright Systems Ltd., Attn: John S. E. Bolland, Mng. Dir. (importer, dist., agent), 62 East Concourse, Beaumaris, Victoria 3193. WTD 11/71.

35820—PAKISTAN — Laundry machinery, equipment required for 200 room hotel. Requests catalogs, quotations, C. & F., Karachi. Orval Landis Assocs. Ltd. (agent), 21-E (A), Block 6, PECHS, Karachi. WTD 5/71.

35860—GUATEMALA—Measuring and dispensing pumps, lubricating oil outfits, grease guns. Correspondence requested in English and Spanish. Elevadores y Maquinaria (importer, dist., agent), 11 Avenida 17-44, Zona 1, P.O. Box 220, Guatemala City. WTD 12/71.

35857—NETHERLANDS — Refrigeration and air conditioning equipment. Exclusive representations or direct purchase. Uniechemie N.V., Attn: A. van der Lande (importer, dist., agent), 16 Kanaal Zuid, Apeldoorn, Gelderland. WTD 11/71.

35892 — ARGENTINA — Portable car washing machines. Correspondence requested in Spanish. Wilfredo Bossut (agent), Olascoaga 83, Mendoza, Prov. de Mendoza. WTD in prep.

35892—NETHERLANDS—Water treatment equipment, apparatus. Hudrochemie N.V., Attn: H. J. Fisher (importer, dist.), Nieuwe Uitleg 29, The Hague. WTD 11/71.

35892—PAKISTAN—Swimming pool filter plant for pool 60′ x 30′. Requests catalogs, quotations, C. & F., Karachi. Orval Landis Assocs. Ltd. (agent), 21-E (A), Block 6, P.E.C.H.S., Karachi. WTD 5/71.

Electric transmission, distribution equipment

36110 — SWITZERLAND — Electric measuring instruments, test equipment, all kinds. Comptronix, Attn: P. Rohner, Mgr. (dist., agent), Drusbergstrasse 19, 8810 Horgen/ZH. WTD 7/71.

36110 — SWITZERLAND — Precision measuring instruments for electronics, telecommunications industries. Silectra G. Glatz & Co. (importer, dist., agent), Seebahnstrasse 109, 8036 Zürich. WTD 1/71.

Electrical industrial apparatus

36212—ITALY—Thyristor variable speed d.c. and a.c. motors using variable frequency inverters. SILECTRON S.R.L. (mfr.), 390 Via Emilia, I 40064 Ozzano Emilia (Bologna). WTD 11/71.

36220—ITALY—Lifting magnets, related control equipment for steel industry. SIX, S.a.S. (dist., mfr., agent), Via S. Quintino 23, 10121 Torino. WTD in prep.

36292—ENGLAND — Electronic power supplies up to about 1 KW output (5 V and about 5 to 50 amps) of high efficiency switching type. Gresham Lion Group Ltd. (importer, dist., mfr.), Twickenham Rd., Hanworth, Middlesex. WTD 5/71.

Electric lighting, wiring equipment

36424—ARGENTINA—Automobile nonglare lamps. Correspondence requested in Spanish. Wilfredo Bossut (agent), Olascoaga 83, Mendoza, Prov. de Mendoza. WTD in prep.

36426 — NETHERLANDS — Lighting equipment, other road warning equipment. Brimos N.V. (importer, dist., agent), 3e Industrieweg, P.O. Box 40, Hattem (Gld). WTD 11/71.

36430—DENMARK — Proximity indicators (proximity switches). HAMRE Ingeniørfirma A/S (agent, engineering firm), 27 Ryttervaenget, DK-3520 Farum. WTD 11/71.

Communication equipment

36623—BELGIUM—All types of traffic signalization devices. Correspondence requested in French. Dicorep (importer, dist., agent), 86 Blvd. Adolphe Max, 1000 Brussels. WTD 11/71.

36623—ITALY—Safety control devices for automatic machinery. SIX, S.a.S. (dist., mfr., agent), Via S. Quintino 23, 10121 Torino. WTD in prep.

36626—FRANCE—Electronic measuring instruments, mainly for detecting and controlling air and water pollution; instruments used in oceanography. Establissements Mesureur (importer, agent), 30, rue Sedaine, 75-Paris 11e. WTD 2/71.

36626—FRANCE—Electronic measuring instruments, mainly for detecting and controlling air and water pollution; instruments used in oceanography. Technitron (importer, dist., agent), 20, rue de Boulainvilliers, Paris 16e. WTD in prep.

36626—FRANCE—Electronic measuring instruments of all types for industrial control and measurement. Ets IZART (importer, agent), 27, ave. Saint-Laurent, 91-Orsay. WTD 4/70.

Electronic components, accessories

36740—DENMARK—Photocells. Hamre Ingeniørfirma A/S (agent, engineering firm), 27 Ryttervaenget, DK-3520 Farum. WTD 11/71.

36790—ISRAEL—Electronic components, parts and accessories for electronic end products, to include condensers, capacitors, etc. Exclusive agency. Microelectronics Ltd. (importer, dist., mfr.), 4 Hapatish St., P.O. Box 614, Industrial Area, Holon. WTD in prep.

36795—SWITZERLAND—Advanced electronic components, accessories, all kinds. Comptronix, Attn: P. Rohner, Mgr. (dist., agent), Drusbergstrasse 19, 8810 Horgen/ZH. WTD 7/71.

36795 — SWITZERLAND — Sophisticated electronic components, accessories for communications industry, measuring instruments, laboratory use. Silectra G. Glatz & Co. (importer, dist., agent), Seebahnstrasse 109, 8036 Zürich. WTD 1/71.

Electrical machinery, equipment, supplies

36930 — KOREA — X-ray apparatus and tubes; X-ray equipment including X-ray tubes, electrotherapeutic apparatus. Catalogs, f.o.b. and c&f Pusan and/or Inchon quotations requested. Nam Buk Medical Instrument Co. (importer, dist., agent), K.P.O. Box 208, Seoul. WTD 6/71.

Engineering, laboratory, scientific, research instruments

38110—ARGENTINA—Engineering, laboratory, scientific and research instruments, allied lines. Interested in contacting CEM's handling above-mentioned product line. ECITEC, S.C.A. (agent), Belgrano 407, Piso 11 y 12, Buenos Aires. WTD 8/71.

38111 — ISRAEL — Precision electromechanical equipment including gyros, gears, etc. Microelectronics Ltd. (importer, dist., mfr.), 4 Hapatish St., P.O. Box 614, Industrial Area, Holon. WTD in prep.

38112—FRANCE—Laboratory and scientific instruments, mainly for detecting and controlling air and water pollution; instruments used in oceanography. Technitron (importer, dist., agent), 20, rue de Boulainvilliers, Paris 16e. WTD in prep.

38112—FRANCE—Laboratory and scientific instruments, mainly for detecting and controlling air and water pollution; instruments used in oceanography. Etablissements Mesureur (importer, agent), 30, rue Sedaine, 75-Paris 11e. WTD 2/71.

38112 — FRANCE — Portable magnetic recorders, 7 tracks, for use in laboratories with measuring instrumentation, in price range $4000 to $4500. Bureau de Liaison (importer, dist., agent), 113, rue de l'Université, Paris 7e. WTD 10/71.

38112—GERMANY—Scanners for microscopic slides, electrophoresis laboratory equipment, apparatus for chemical, pharmaceutical, biochemical laboratories, systems for chemical analysis. Shandon Labortechnik GmbH. (importer, dist., agent), Karl-von-Drais Str. 18, 6000 Frankfurt/Main. WTD 11/71.

38112—ITALY—Chemical laboratory, research, scientific instruments. Dr. Mario De La Pierre di Pietro De La Pierre (importer, dist., agent), Via dei Mille 16, 10123 Torino. WTD 2/71.

38112 — SWITZERLAND — Laboratory and scientific instruments, all kinds, analytical and digital; for medical, pollution control, water treatment, biological applications, and for electronics industry. Comptronix, Attn: P. Rohner, Mgr. (dist., agent), Drusbergstrasse 19, 8810 Horgen/ZH. WTD 7/71.

38112 — SWITZERLAND — Precision laboratory instruments for electronics, telecommunications industries. Silectra G. Glatz & Co. (importer, dist., agent), Seebahnstrasse 109, 8036 Zürich. WTD 1/71.

38112—SWITZERLAND—Laboratory instruments, all kinds, in particular for medical applications. Medica Materia SA, Attn: Mr. R. Manera, Mgr. (importer, dist., retailer), 2 route de Renens, 1016 Lausanne. WTD in prep.

Instruments for measuring, controlling, indicating physical characteristics

38213 — CANADA — Clinical thermometers. Exclusive agency. Spectrex Ltd. (importer, dist., agent), 2245 St. Francois Road, Dorval 740, Quebec. WTD 2/71.

38213 — FRANCE — Industrial instruments for measurement and control, including temperature measuring instruments, principally infra-red pyrometers for low temperature measurements. Ets IZART (importer, agent), 27, ave. Saint Laurent, 91-Orsay. WTD 4/70.

38213—GERMANY—Electric measuring, controlling instruments. Panta Technic GmbH (importer), 17 Dillsteiner Strasse, P.O. Box 1325, D-7530 Pforzheim, Baden-Wuerttemberg. WTD 10/71.

38216—FRANCE — Other mechanical measuring and controlling instruments, principally industrial types, including temperature measuring instruments. Ets IZART (importer, agent), 27, ave. Saint-Laurent, 91-Orsay. WTD 4/70.

38216 — SWITZERLAND — Measuring, controlling instruments, analytical and digital, all kinds. Comptronix, Attn: P. Rohner, Mgr. (dist., agent), Drusbergstrasse 19, 8810 Horgen/ZH. WTD 7/71.

38220—FRANCE — Automatic temperature controls, principally for industrial purposes. Ets IZART (importer, agent), 27, ave. Saint-Laurent, 91-Orsay. WTD 4/70.

38220—ISRAEL—Thermocouple connectors, connecting heads, temperature-control compensating cables. Exclusive distribution. Industrial Controls & Instruments Ltd.-"Madel-Taas" (importer, dist., agent), 79 Yehuda Halevy St., P.O. Box 14095, Tel Aviv. WTD in prep.

Optical instruments, lenses

38311—ISRAEL—Precision optics, all types; electro-optics (professional) to include lasers, range-finder and highly professional lenses. Exclusive agency. Microelectronics Ltd. (importer, dist., mfr.), 4 Hapatish St., P.O. Box 614, Industrial Area Holon. WTD in prep.

38311—ITALY—Binoculars for hunting purposes, and tripods therefor. Guglielmo Demarchi & C. (importer, dist., agent), Via Gobetti 11, 10123 Torino. WTD 4/71.

Surgical, medical, dental instruments

38410 — CANADA — Disposable hypodermic needles, syringes; disposable surgical instruments. Exclusive agency. Spectrex Ltd. (importer, dist., agent), 2245 St. Francois Road, Dorval 740, Quebec. WTD 2/71.

38410 — SWITZERLAND — Medical instruments, bioelectronics equipment, instruments for medical, biological research. Comptronix, Attn: P. Rohner Mgr. (dist., agent), Drusbergstrasse 19, 8810 Horgen/ZH. WTD 7/71.

38410 — SWITZERLAND — Bio-electronic equipment; intensive care and monitoring systems; perinatal instruments. Medica Materia SA, Attn: R. Manera, Mgr. (importer, dist., retailer), 2 route de Renens, 1016 Lausanne. WTD in prep.

38410 — SWITZERLAND — Bio-electronic equipment of advanced design; in particular anesthesia and reanimation apparatus, intensive care equipment, circulatory equipment. Georg Bucher & Co., Attn: Mr. G. Bucher (importer, dist., retailer), Stockenstrasse 4, 8802 Kilchberg. WTD in prep.

38410 — SWITZERLAND — Apparatus and sundries for anesthesia, reanimation, intensive care, in particular for perinatal applications. SYNMEDIC AG, Attn: Dr. Stephan von Mauthner (importer, dist., retailer), Seebahnstrasse 85, P.O. Box, 8036 Zürich. WTD in prep.

38421—INDIA — D.C. defibrillators and pacemakers with accessories; endotracheal tube; St. Sange tube; safety shunt; plastic trachestomy tube; cardiac cathetor; cardio-vascular suture; Faggot's cathetor (for embolectomy); respirators: implantable cardiac pace-maker with accessories; portable intermittent positive, pressure breathing apparatus with accessory; hydrocephalus shunts; vascular grafts; heat-valve prosthesis; portable haemo-dialyser; small portable pumps for giving slow infusion of anti-cancer drugs. J. T. Jagtiani (importer, agent), National House, Tulloch Rd., Apollo Bunder, Bombay 1. WTD 11/71.

38421—SWITZERLAND — Hospital and medical disposables; perinatal supplies; breathing devices, resuscitators. Medica Materia SA, Attn: Mr. R. Manera, Mgr. (importer, dist., retailer), 2 route de Renens, 1016 Lausanne. WTD in prep.

38421—SWITZERLAND — Reanimation, breathing devices, resuscitators, circulatory and bone prosthetics, artificial medical supplies. Georg Bucher & Co., Attn: Mr. G. Bucher (importer, dist., retailer), Stockenstrasse 4, 8802 Kilchberg. WTD in prep.

38421 — SWITZERLAND — Disposables for medical use, breathing devices, resuscitators, etc., SYNMEDIC AG, Attn: Dr. Stephan von Mauthner (importer, dist., retailer), Seebahnstrasse 85, P.O. Box, 8036 Zürich. WTD in prep.

Ophthalmic goods

38510—JAMAICA—Sunglasses. Vernon Lindo Ltd., Attn: Vernon Lindo, Mgr. (importer, agent, retailer), P.O. Box 28, Ocho Rios, St. Ann. WTD 4/71.

Photographic equipment, supplies

38612—SWITZERLAND — Office photocopying equipment. Cäsar Muggli (importer, agent, retailer), Linteschergasse 15, 8023 Zurich. WTD 11/70.

Jewelry, silverware, plated ware

39110—JAMAICA—Jewelry made of semiprecious stones. Vernon Lindo Ltd., Attn: Vernon Lindo (importer, agent, retailer), P.O. Box 28, Ocho Rios, St. Ann. WTD 4/71.

Toys, amusement, sporting goods

39410—AUSTRALIA—Educational toys, games. Educational Aids (Aust.) Pty. Ltd., Attn: S. O. Wainwright, Mng. Dir. (dist., mfr., agent), Corner Davis and Hopkins St., Wingfield, S.A., P.O. Box 1309, Adelaide, S.A. WTD 11/71.

39410—SWITZERLAND—Sport oriented action games. Lacoray SA, Attn: R. Müller (dist., agent), 1 Place Saint Gervais, 1211 Geneva 11. WTD 7/71.

39490—JAMAICA—Sporting goods for beach or swimming pool only, including plastic swimming pools, beach balls, plastic swimming pool slides. Vernon Lindo Ltd., Attn: Vernon Lindo, Mgr. (importer, agent, retailer), P.O. Box 28, Ocho Rios, St. Ann. WTD 4/71.

39493—FRANCE—Tennis, related equipment; riding goods, equipment; water skiing equipment; underwater sports equipment; winter sports equipment; snow skiing equipment. Descriptive literature, price lists requested. Sports-Boutique, Attn: Mrs. Poncet (agent, retailer), Place du Marché, 40 Mimizan-Plage. WTD 1/71.

39493 — PAKISTAN — Bowling alleys, playing supplies. Requests catalogs, quotations, C. & F., Karachi. Orval Landis Assocs. Ltd. (agent), 21-E (A), Block 6, PECHS, Karachi. WTD 5/71.

39493 — PAKISTAN — Skeet shooting equipment. Requests catalogs, quotations, C. & F., Karachi. Orval Landis Associates Ltd. (agent), 21-E (A), Block 6, PECHS, Karachi. WTD 5/71.

39493—SWITZERLAND—Sporting and athletic goods, equipment, such as playground and gymnasium equipment, camping and hiking articles, health and exercising equipment, fitness apparatus. Lacoray SA, Attn: R. Müller (dist., agent), 1 Place Saint Gervais, 1211 Geneva 11. WTD 7/71.

39493 — SWITZERLAND — Aluminum, metal and plastic tennis rackets; tennis balls; novelty sporting goods. P. & H. Fricker (importer, dist.), Seestrasse 58, 8803 Rüschlikon. WTD 12/71.

Manufacturing industries

39932 — NETHERLANDS — Road signs, beacons, other nonelectric road warning equipment. Brimos N.V. (importer, dist., agent), 3e Industrieweg, P.O. Box 40, Hattem (Gld). WTD 11/71.

39990—JAMAICA—Beach, garden, and patio equipment not elsewhere classified, including cigar and cigarette lighters, bone and beaded novelties, parasols, pipes, beach umbrellas. Vernon Lindo Ltd., Attn: Vernon Lindo, Mgr. (importer, agent, retailer), P.O. Box 28, Ocho Rios, St. Ann. WTD 4/71.

Other Foreign Official Tenders

HONDURAS—The agency for electrical energy has issued a tender for the supply and erection of **351 kilometers of transmission lines of 138 KV, and 56 kilometers of transmission lines of 69 KV.** This tender is Section F of the IV Electrification Project, financed with World Bank and IDA funds. The bid deadline is Feb. 17. Contractual documents may be purchased for $50 from the Empresa Nacional de Energia Electrica, Apartado No. 99, Tegucigalpa. The consulting engineer for this undertaking is ELC-Electroconsult, Via Chiabrero 8, 20151 Milan, Italy.

KUWAIT—The Central tenders committee has issued a tender for the **construction of a radio and television center.** Bid deadline is Jan. 11. This project will include building construction, air conditioning, service controls and fire protection systems, telecommunications and electrical equipment, and the supply and erection of the electronic equipment and components for the radio and TV facilities. Copies of the announcement are available from the Central Tenders Committee, Council of Ministers' Building, Sief Palace, Kuwait, or on a short-term loan basis to firms located in the U.S. from the Communications Electronics Division, BDC-720, Room 4320, U.S. Department of Commerce, Washington, D.C. 20230. ★(202-967-4823)

MALAYSIA—The Director, Malaysian Meteorological Service has issued tender No. Surat Kami (76) KP/AM/1570 Kdn 2 for **supply and installation of radiosonde ground equipment.** Bid deadline is Jan. 31. Copies of tender announcement and specifications are available from the Director, Malaysian Meteorological Service, Jalan Sultan, Petaling Jaya, Selangor or on a short-term loan basis to firms located in the U.S. from the Communications-Electronics Division, BDC-720, Room 4320, U.S. Department of Commerce, Washington, D.C. 20230. ★(202-967-4823)

MALAYSIA—The Director, Malaysian Meteorological Service has issued tender No. Surat Kami (77) KP/AM/570 Kdn 2 for the **supply and installation of two meteorological radars.** Bid deadline is Jan. 31. Copies of tender announcement and specifications are available from the Director, Malaysian Meteorological Service, Jalan Sultan, Petaling Jaya, Selangor, or on a short-term loan basis to firms located in the U.S. from the Communications-Electronics Division, BDC-720, Room 4320, U.S. Department of Commerce, Washington, D.C. 20230. ★(202-967-4823)

Greece Issues Tenders On Telephone System Parts

The President of Greece's OTE Procurement Committee has issued tender No. 6912 for the supply of materials and equipment for secondary telephone installation. Bid deadline is Jan. 20. Copies of tender announcement and specifications are available from the Procurements Committee of OTE, 6 Klissovis St., Athens, or on a short-term loan basis to firms located in the U.S. from the Communications-Electronics Division, BDC-720, Room 4320, U.S. Department of Commerce, Washington, D.C. 20230 (202-967-4823).

Malaysia Issues Tenders On Multi-Channel Recorders

The Secretary-General of Malaysia's Ministry of Transport has issued tender No. 3 DLM CAD/COMS/3 for the supply of multi-channel communications recorders. Bid deadline is Jan. 15. Bid should offer two multi-channel communications recorders for 24 or 31 channels on one inch tape, 152 rolls of tape in a plastic magazine (12 hours recording) and a reproducer (24 or 31 channels) for monitoring the information on three channels at a time. Copies of tender announcements and specifications are available from the Secretary-General, Ministry of Transport, Jalan Young, Kuala Lumpur, Malaysia or on a short-term loan basis to firms located in the U.S. from the Communications Electronics Division, BDC-720, Room 4320, U.S. Department of Commerce, Washington, D.C. 20230 (202-967-4823).

Kenyan Firm To Order Monthly Paper Shipments

The Kenyan firm, Gathani Ltd., of Nairobi requests offers for providing 100-125 tons/month of unbleached kraft paper in weights of 60 and 70 grams/M^2. Also requests offers to provide 80-90 tons/month of bleached white unglazed paper in weights of 75, 100 and 105 grams/M^2. Write: Gathani Ltd., P.O. Box 329, Nairobi. Further details available from Forest Products Division, BDC, Room 5099, U.S. Department of Commerce, Washington, D.C. 20230. ★(202-967-2738). WTD 1/71.

Nigerian Firm Seeks Chemicals

United Nigerian Textiles, Ltd. desires to buy the following chemicals: caustic soda, fused, 200 tons; hydrogen peroxide 35 percent, oxygen 20 tons; hydrochloric acid 22 percent, 50 tons; glacial acetic acid 20 tons; urea, granular 20 tons; sodium acetate 50 tons; sodium nitrate 20 tons; sodium carbonate 100 tons; sodium bicarbonate 20 tons; sodium bisulphite 10 tons. Interested U.S. firms should write: United Nigerian Textiles, Ltd., Attn: Mr. S. F. Zao, Dir., Industrial Area, P.O. Box 365, Kaduna, Nigeria. WTD in prep.

Future Construction Abroad

BAHAMAS—The Bahamas Oil Refining Co. (BORCO) Hydro-desulphurization Expansion Program calls for installing a hydro-isomax process held under license by Joint Universal Oil Products, a subsidiary of Chevron-Standard Oil Company of California. The **hydro-desulphurization unit** will be capable of processing 60,000 barrels of oil a day. BORCO is presently preparing the bid tender and will be qualifying selected bidders.

BAHRAIN—The Bahrain Government has approved a plan to build an **aluminum xtrusion plant** at a cost of approximately $2.5 million. The project will be financed partly by Kaiser Aluminum and partly by the Government of Bahrain. Construction of the plant should start early next year and take about 18 months to complete. Production capacity should run at about 3,000 tons annually. The new plant is an ancillary unit to the Alba Aluminum smelter.

BOLIVIA—The Ministry of Mines has announced that the Government of Bolivia will call for international bids by February to **build a zinc smelter.** A Soviet metallurgical team is presently doing an evaluation study on Bolivian zinc resources.

CANADA—The Maritime Telegraph & Telephone Company has announced a $140 million **capital construction program** through 1976. This represents a speedup of a capital program that was formerly about $22 million a year. U.S. firms interested in selling goods and services may write, telephone or telegraph Maritime Telegraph and Telephone Co., Ltd., 1520 Hollis St., Halifax, Nova Scotia.

FRANCE—A loan copy of the study of the proposed **transportation system for the city of Lille** is available from the Trade Opportunities Staff, BDC-584, Room 4813, U.S. Department of Commerce, Washington, D.C. 20230. An earlier report on this project appeared in the Jan. 11, 1971 issue of *Commerce Today.* Interested U.S. firms may contact Monsieur Elie de Caluwe, Secretaire General Adjoint, de la Communaute Urbaine de Lille, Rue de Ballon, 59—Lille.

GERMANY—Officials of the **new Bremen University** (reported in *Commerce Today,* March 8) are seeking U.S. offers for the following equipment: Complete outfitting of TV and motion picture studio (project budget about $200,000), including such motion picture apparatus and equipment as: cameras, projectors, sound recording and reproducing equipment (SIC 38610); three TV cameras, black and white, control consoles and switchers (mixing panels), closed circuit TV equipment, video tape recorders, including super-8 system (SIC 36622); studio lighting equipment (SIC 36425); software programs for educational technology utilizing above systems. Air and water pollution measuring instruments, chemical and physical, for scientific research and practical applications (SIC 38110). Material testing instruments of destructive and non-destructive types, including supersonic, acoustic emission, radiographic (X-ray and neutron radiation), electric, magnetic and thermal (SIC 38210). Xenon and mercury high pressure lamps with fixtures and main sets for connecting with public supply network AC, 220 volts, 50 cycles (SIC 36422). Remote sensing equipment for aerial and underwater survey and mapping research (SIC 38110). Detailed specifications have not been determined, and the officials are open to suggestions. Interested U.S. firms should contact: Mr. Klaus Bergmann, Universitaet, Abtlg. 4, Achterstrasse, 28 Bremen, Germany. SIC's 38110, 38210 and 36422 have not yet been budgeted but are pilot orders which will be substantially increased when the University student body increases from its present 450 to about 7,000 students in 1974.

JAMAICA—The Clarendon Parish Council plans to build and equip a **$188,000 modern abattoir.** The abattoir is expected to process between 50 and 75 head of cattle weekly and will be located in the capital city of the parish, May Pen. The Jamaican Government Ministry of Local Government has already granted $42,000 towards the construction of the building. *Developers:* The Clarendon Parish Council, 1 Sevens Rd., May Pen P.O., Attn: Oscar Hammond, Secretary. *Architects:* The Engineering Div., Clarendon Parish Council, May Pen P.O., Attn: R. A. Dalton, Superintendent. The contractors are yet to be named, but construction is due to start soon. Potential suppliers of equipment should contact Mr. Hammond.

JAMAICA—Newleigh Ltd. is building in 1972 a **three-story luxury apartment block and ten three-bedroom houses** on the New Green Road subdivision at Mandeville. A **four-story office building** is planned for 1973. *Developer:* Newleight Ltd., P.O. Box 71, 49 Manchester Rd., Mandeville, Attn: John W. McFarlane, Managing Director. *Architect:* H. D. Repole and Assoc., 3 Leinster Rd., Kingston 5. *Contractor:* Not yet chosen.

JAMAICA—Key Homes Ltd. is building **900 three-bedroom houses and apartment blocks** in its Queensbury Scheme located in the Red Hills residential suburb of Kingston. The first phase of 170 houses began Aug. 4, and is to be completed by next June. Ensuing phases of 175 units per year will continue to build three-bedroom houses to sell for $17-22,000. *Developer:* Key Homes Ltd., 15 Caledonia Ave., Kingston 5, Attn: Peter Rousseau, Managing Director. *Architect:* Marvin D. Goodman & Assoc., 5½ Waterloo Rd., Kingston 10. *Contractor:* New Construction Ltd. (subsidiary of Key Homes Ltd.), 15 Caledonia Ave., Kingston 5, Attn: William Lord, Managing Director.

JAPAN—The Japanese Ministry of Transport plans for fiscal 1972 (April 1972-March 1973) increased expenditures for **air, sea and land transportation systems.** Of particular interest to American manufacturers are proposals involving purchase of NAVAID equipment ($9.4 million), jet aircraft and the construction of new bullet (high speed) trains ($5 billion). A copy of the American Embassy's report A-953, covering the Ministry of Transport's 1972 budget requests, is available from the Trade Opportunities Staff, BDC-584, Room 4813, U.S. Department of Commerce, Washington, D.C. 20230.

KUWAIT—The Kuwait Oil Co. (KOC) plans to **expand the onshore Ahmadi crude storage and transport installations and the offshore "Sea Island" loading facilities.** According to KOC officials, the total combined value of the projects will be close to $46.5 million.

MEXICO—Banco de Mexico recently published a call for bids on the Cancun resort project. The notice calls for the **construction of a bridge, dredging, a potable water system for the tourist zone, a sewerage system for the tourist zone, electrification system, clearing land, landscaping, construction of sidewalks, parking spaces.** It calls for the construction in the tourist zone of covered and uncovered areas, retention walls, a golf clubhouse, a convention center, a commercial center, improvement of the beaches, laying out the fairways and greens for the golf course. Foreign companies whose countries are members of the International Development Bank and the International Monetary Fund are eligible to bid. The costs of the project are covered by IDB loan. Companies should register their interest with Banco de Mexico, INFRATUR, Isabel la Catolica #24—4° piso, Mexico 1, D.F. Companies will have until Jan. 1 to complete the required documentation and return it to INFRATUR.

MUSCAT & OMAN—A **cement plant** with an annual capacity of 100,000 tons is being planned for the Sultanate of Oman. The new facility, costing $8 million, should generate employment for some 200 Omanis and will provide immediate supplies of cement for the numerous construction projects now under way in the towns of Muscat and Matrah. Construction is due to start next year on the site at Al-Khoram near Muscat, if a survey being carried out by an Indian consultant convinces the Government that such a plant is indeed feasible. American firms interested in further details on the project should write directly to the Ministry of Economy, Sultanate of Oman, Muscat, Oman.

PARAGUAY—Inter-American Development Bank loans, one for $24.2 million and a second for 12 million pounds sterling have been approved for use in amplification of **electric power generation, transmission and distribution facilities** in Paraguay. The total project is valued at $38.8 million. Sub-projects are the: supply and installation of two 45,000 kw. hydroelectric generators at the Acaray site; supply and installation of two 15 mw. gas turbo-alternators as an alternate power source for Asuncion. Items to be installed at nearby San Lorenzo include: a small control dam on the Iguazu River (not to be confused with another river of the same name on the Brasil-Argentine Border) above the present Acaray Dam; a power substation in Asuncion; distribution facilities in and around Asuncion, including lines from San Lorenzo; possible new or improved plant construction in Concepcion, including distribution to four nearby towns; transmission and distribution facilities from Acaray to interior towns. It is expected that calls for prequalification as bidders on each of the above listed projects will be issued separately over the next few months. One, in fact, for the two 15 mw. gas turboalternators, has already gone out. Interested U.S. firms may contact: ANDE, Administracion Nacional de Electricidad, Dpto de Licitaciones, Calle Pedro Cardozo 560, Asuncion.

THAILAND—The Central Hospital, which is operated by the Bangkok Municipality, is planning to construct **three ten-story buildings costing $6 million** on a site adjacent to the present hospital. The new buildings will house the hospital's nursing school and its in-patient departments. New equipment will be purchased for these facilities as construction progresses. This project is still preliminary and implementation will depend on national budget allocation. According to present plans, the design, engineering, and supervisory works will be handled entirely by architects and engineers of the Public and Municipal Works Department. However, the following hospital equipment will have to be imported: kitchen equipment; laundry equipment; elevators; air conditioning equipment; laboratory equipment; chemical reagent equipment; surgical equipment; X-ray equipment; scanning equipment; radio isotope; other diagnostic apparatus. The hospital would welcome catalogs and quotations on such equipment. Interested American suppliers should write directly to: Dr. Kampee Mallikamas, Medical Director, Central Hospital, 514 Luang Rd., Bangkok.

Visiting Buyers And Officials

NETHERLANDS—Peter T. Gebhard, Development Manager, Elmex N.V., 10c Glashaven, Rotterdam, interested in purchasing U.S. **packaging, filling and labeling equipment, advanced surgical and hospital equipment, process patents for chemical processes, patented electronic products, industrial ovens, measuring equipment, especially industrial lasers** and requesting technical information. Dec. 4 via Boston for approximately six weeks. c/o 182 Rumstick Rd., Barrington, R.I. 02806 (401-245-5845) and c/o Impco Inc., 335 Valley St., Providence, R.I. 02908 (401-521-2490). Itinerary: Boston, St. Louis, Chicago, Washington, D.C., Richmond, Va., New York, Boston, and other cities as arranged. WTD 11/71.

New Trade Lists

The Bureau of International Commerce has published the following Trade Lists of which mimeographed copies may be obtained by firms domiciled in the United States from BIC-924, Department of Commerce, Washington, D.C. 20230, and from Department of Commerce Field Office. The price is $1.00 per list for each country.

American Firms, Subsidiaries and Affiliates—Bolivia, October.

American Firms, Subsidiaries and Affiliates—Luxembourg, October.

Business Firms, Nepal, October.

Honduras Announces Tenders On Telecommunications Items

Honduras' Empresa Nacional De Energia Electrica has issued Tender No. E for the supply and supervision of installation of carrier circuits, teleprotection and telephone equipment for the 138KV system. Bid deadline is Feb. 17. This tender is section E of the IV electrification project of ENEE, financed with funds from a World Bank loan and IDA credit. Copies of tender announcement and specifications are available from the EMPRESA Nacional De Energia Electrica, Apartado No. 99, Tegucigalpa D.C. Honduras, for $50 per copy.

New Publications

When ordering any publication, indicate title and series designation, if indicated, and make checks or money orders payable to the Superintendent of Documents. Orders should be sent to the U.S. Department of Commerce, Washington, D.C. 20230, or to any of its field offices.

OFFICE OF THE SECRETARY

Land water pollution from recreational use. 24pp. 25¢.

Export control. 97th quarterly report, 3rd quarter 1971, by the Secretary of Commerce to the President, the Senate, and the House of Representatives. 66pp. 35¢.

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